EXHIBIT A

Detailed Curriculum Vitae

1 Personal Information

Name	Ricardo Baeza-Yates
E-mail	rbaeza@acm.org
Personal website	http://www.baeza.cl/

2 Current Activities

- Director of Research at the Institute for Experiential AI, Northeastern University, Silicon Valley, USA, since 2021.
- Consultant for startups, companies, and venture capital in Brazil, Chile, Mexico, Spain, and USA; as well as for international organizations like United Nations and IADB (BID).
- Member of Global Partnership of AI (Responsible AI Working Group), ACM's Policy Technology Committee, IEEE's AI & Automated Systems Policy Committee, IABD's Advisory Committee for fAIr LAC (Fair AI in Latin America and the Caribbean), and Catalonia's AI Observatory Advisory Board.
- Full Professor (part-time) at the Dept. of Engineering, Universitat Pompeu Fabra, Barcelona, Catalonia, Spain, since 2004.
- Full Professor (part-time) at the Dept. of Computing Sciences, Universidad de Chile, Santiago, Chile, since 1989.
- Corresponding member of the Brazilian Academy of Sciences since 2019.
- Founding member of the Chilean Academy of Engineering since 2010.
- Member of the Chilean Academy of Sciences since 2023 (corresponding member 2002-2022).
- Member of the advisory board of the National Portuguese Research Lab in CS, INESC, since 2012.
- Member of the advisory board of the CSE Department of UC Riverside as well as the Department of Informatics Engineering, University of Porto, Portugal, since 2020.
- Member of the Advisory Board of the Professional Association of Computing Professionals of Catalonia since 2009.

3 Highlights

- World class expert in responsible AI, search, data mining and data science in general.
- Research innovator and team builder with leadership and multitasking skills.

- Member of Spain's Advisory Council of AI from July 2020 to March 2023.
- Lead co-author with Jeanna Matthews of the ACM Statement on Responsible Algorithmic Systems, Oct 2022.
- VP of Research for Yahoo Labs (2006-2016) with experience as research manager and technical lead in applied projects on web search, usage data mining and web advertising (sponsored search and native).
- Co-author of the most used and cited textbook on search concepts and technology: Modern Information Retrieval (two editions and translated to Japanese, Korean, and Portuguese).
- ACM (less than 1% of the members) and IEEE Fellow.

4 Studies

- Ph.D. in Computer Science, University of Waterloo, Ontario, Canada, May 1989. Supervised by Gaston Gonnet, and working in the New Oxford English Dictionary Project.
- M.Eng. in Electrical Engineering (Digital Systems and Automatic Control), Univ. de Chile, 1986.
- M.Sc. in Computer Science, Universidad de Chile, 1985.
- Electrical Engineer, specialization in Digital Systems, Universidad de Chile, 1985.
- Bachelor in Computer Science, Universidad de Chile, 1983.

5 Awards, Distinctions, Fellowships and Scholarships

- Named Corresponding Member of the Brazilian Academy of Sciences, 2019.
- Award Salvà i Campillo to the Person of the Year, Catalan Association of Telecommunications Engineers with the cooperation of the Association of Computing Engineers of Catalonia, 2019.
- National Research Award for applied research and technology transfer, Scientific Computing Societies of Spain & BBVA Foundation, Spain, 2018.
- Best paper award at Techpulse 2014, the main annual technical event of Yahoo. This award was obtained with Di Jiang, Fabrizio Silvestri and Beverly Harrison for a new algorithm that using deep learning allows to predict the next mobile app that a person will use with more than 90% accuracy.
- Computer World Spain Award to Yahoo Labs Barcelona for contributions to big data in 2014.
- Master inventor award, Yahoo, 2012.
- 2012 ASIS&T Best Information Science Book Award for the second edition of Modern Information Retrieval (see books).

- Named IEEE Fellow for contributions to the development of computer science, 2011.
- National Award of the Chilean Association of Engineers, 2010.
- Founding member of the Chilean Academy of Engineering, 2010.
- Named ACM Fellow for contributions to information retrieval algorithms and techniques, 2009.
- CLEI Distinction to Achievements in Informatics, given by the Latin American association of CS departments to people that has contributed to the development of CS in the region, 2009.
- J. W. Graham Medal in Computing & Innovation given to distinguished alumni of the University of Waterloo, Canada, 2007.
- Erskine Fellowship from the University of Canterbury, New Zealand, 2004.
- Chilean Fulbright Commission Fellowship in Information Technology, 2003.
- Manuel Montt award to “Modern Information Retrieval” (co-authored with Berthier Ribeiro-Neto) as the best technical book published by Chilean authors during 1997-2001 (shared with Tomás Moulian’s essay “Current Chile: Anatomy of a Myth”), 2002.
- Named corresponding member of the Chilean Academy of Sciences, 2002.
- Recognition from Informatics Magazine (IDG Chile) for the Development of IT in Chile, 2001.
- COMPAQ Award to the best Brazilian research article in CS published in 1996 (with Eduardo Barbosa and Nivio Ziviani), 1997.
- Fellowship from the Education and Science Ministry of Spain to have a sabbatical year at the Polytechnic Univ. of Catalunya, 1996.
- Award “Ramón Salas Edwards” of the Institute of Engineers of Chile to the best research on engineering on the last 4 years in 1994.
- Recipient of a United States Information Service Important Visitor program, June 1994.
- Award of the Organization of American States (OAS) for young researchers in Exact Sciences, 1993.
- Award from PC Software magazine to the best Chilean software, SearchCity, designed together with Pablo Palma in 1992. This software for Windows 3.1 was similar to Google Desktop but was too ahead in time to succeed.
- Special mention, University of Chile Award for Young Researchers, 1992.
- Award “Marcos Orrego Puelma” of the Institute of Engineers of Chile to the best engineering student graduated in Chile during 1985.
- Ontario Graduate Scholarship, May 1988-April 1989.

- Institute for Computer Research scholarship for graduate studies, University of Waterloo, May 1986-August 1988.
- University of Waterloo graduate scholarship, January 1987-April 1988, and January 1988-April 1988.
- Department of Computer Science Fellowship (Univ. of Waterloo), September 1988-March 1989.
- Information Technology and Research Centre graduate scholarship (Canada), January 1989-April 1989.

6 Professional and Entrepreneurship Experience

- CEO of NTENT Hispania, a R&D subsidiary of NTENT USA, Barcelona, Spain (April 2017 - December 2020).
- CTO of NTENT, a semantic search technology company, Carlsbad, USA (June 2016 - June 2020).
- Chief Research Scientist of Yahoo Labs from October 2015 to February 2016 in Sunnyvale, USA.
- VP of Research at Yahoo Inc. from August 2014 to February 2016 in Sunnyvale, USA.
- VP of Research for EMEA and Latin America at Yahoo Inc. from January 2006 to September 2015, where I started and lead the labs in Europe (Barcelona, Spain) and Latin America (Santiago, Chile).
- Member of the Scientific Advisory board of EURECAT, Barcelona (2015-2017).
- Member of the Executive Board of Barcelona Media Foundation (2010-2015).
- Member of the board of directors of Yahoo Hungary (2009-2016) and Yahoo Israel (2009-2012).
- Supervised Yahoo Labs London from its inception in 2012 and until 2015.
- Supervised Yahoo Labs Haifa from its inception in 2008 and until 2012.
- Co-founder of Raditech in 2001, a Spanish company that offered vertical search as a service, particularly Buscopio, a Spanish web search engine. The company was sold to Fonetic, another Spanish company, in 2007.
- Founder and CEO of TodoCL, a web search engine that covered Chilean websites from 2000 to 2015. It had more than 100 thousand indexed websites and millions of queries per month.
- Member of the consulting committee for the design and evaluation of the new identity card and passport for the National Chilean Civil Registry from 1995 to 2005. In particular I was in charge of evaluating the AFIS (Automated Fingerprint Identification System) system for identity verification.
- International consultant for the United Nations (PNUD) for a governmental system in Perú, 1998.
- Consultant for the International Organization for Migrations, United Nations, for the analysis of the information systems of the Chilean Congress, 1990.
- Consultant for many companies in Chile, including IBM, Langton-Clarke, Sonda, etc., 1990-1992.

7 Academic Experience

- Director for Graduate Programs in Data Science (half-time), Northeastern University at Silicon Valley, USA (2018-2020).
- ICREA Research Professor, Dept. of Information and Communication Technologies, Universitat Pompeu Fabra, Barcelona, Spain, Dec 2004-Dec 2005. Part-time Professor since 2006.
- Faculty member at the Department of Computer Science, University of Chile, Santiago, Chile, 1985-2005 (Professor since April 1995). Part-time Professor since 2006.
- Adjunct Professor, Dept. of Computer Science, University of Waterloo, Canada, June 2016-today.
- Founder and first director of the Center for Web Research (www.cwr.cl), 2002-2005.
- Chair of the CS Dept. (Univ. of Chile) from June 1993 to September 1995, and also from November 2002 to November 2004.
- Founder and director of the post-graduate program on Software Projects Management, 1998-2004.
- Visiting Professor (sabbatical) at the CS Dept., Canterbury University, New Zealand (February-March, 2004).
- Visiting Professor (sabbatical) at the CS Dept., Univ. of Sydney, Australia (January 2004).
- Visiting Professor (sabbatical) at the CS & SE Dept., Univ. of Melbourne, Australia, (November-December, 2003).
- Visiting Professor at the CS Dept., Stanford University, July 2003.
- Visiting Professor at the Technology Dept., Pompeu Fabra University (February 2000, 2001, 2002 and 2003).
- Visiting Professor (sabbatical) at the LSI Dept., Polytechnic Univ. of Catalunya, Barcelona, Apr to Dec 1996.
- Visiting Professor (sabbatical) at the Mathematics Research Center (CRM), Barcelona, Jan to Mar 1996.
- Coordinator for the Univ. of Chile of a M.Sc. program at Univ. Mayor de San Simón, Cochabamba, Bolivia, jointly given with Utrecht University (Netherlands) and Catholic University of Chile, 1996-1999.
- Member of the Post-graduate Engineering Committee of the University of Chile, 1991-1995.
- Member of the Exact and Earth Sciences Research Committee of the University of Chile, 1992-2000.
- Coordinator for the M.Sc. program in Computer Science, University of Chile, 1990-1991.
- Postdoctoral fellowship at the University of Waterloo from May to September of 1989.

- Lecturer at the Universidad de Chile from 1984 to 1986.
- Part time lecturer at the Pontificia Universidad Católica de Chile in 1985.
- Part time lecturer at the Universidad de Santiago from 1984 to 1985.
- Research assistant at the Computer Science Department of University of Waterloo (1986-89), and Universidad de Chile (1982-83).
- Research assistant at the Department of Electrical Engineering of Universidad de Chile in 1982.
- Teaching assistant of several courses at the Computer Science Department of University of Waterloo (1986-89) and Universidad de Chile (1981-83).

8 Service Experience

- Corresponding member of the Brazilian Academy of Sciences since May 2019.
- Member of the editorial committee of ACM Books since 2013.
- Founding member of the Chilean Academy of Engineering since 2010.
- Corresponding member of the Chilean Academy of Sciences since December 2002.
- Advisory board member for the National Portuguese Research Lab in CS, INESC Lisbon, since 2012.
- Member of the ACM Council, USA, from July 2012 to June 2016.
- Member of the advisory board of ISI Foundation, Torino, Italy, since 2014.
- Member of the Advisory Board of the Professional Association of Computing Professionals of Catalonia (COEINF) since 2009.
- Member of the ACM European Council from 2010 to 2014.
- Member of the Publications Board of the ACM, USA, from 2007 to 2009.
- Member of the ACM SIGMOD Doctoral Dissertation Award committee from 2006 to 2007.
- Member of the governmental committee for the Chilean Digital Agenda from 1998 to 2005.
- Chilean site director of the regional ACM Programming Contest and member of the South American steering committee, 1998-2005.
- Chilean representative in the European Molecular Biology Network (EMBNET), 2000-2005.
- Member of the Board of Governors of the IEEE Computer Society, USA, from 2002 to 2004.
- President of CLEI (Latin American Center of Studies in Informatics, a Latin American association that gathers more than 60 computer science departments in 14 countries) from 2000-2004.

- International Coordinator of the Ibero-American cooperation program in science and technology (CYTED) in the areas of Applied Electronics and Informatics, 2000-2004.
- Member of the board of the European Association for Theoretical Computer Science (EATCS), 2001-2003.
- President of the Chilean Computer Science Society (SCCC) from October 1992 to November 1995 and from December 1996 to November 1998. Board member from December 1995 to November 1996 and from November 1998 to November 2002.
- Member of the evaluation committee for FONDEF (technology transfer program), National Research Council for Science and Technology, Chile, 1991-1995 and 2001-2002.
- Member of the evaluation committee for FONDECYT (basic research program), National Research Council for Science and Technology, Chile, 1999-2000.
- President of the Chilean IEEE Computer Society chapter, 1998-2000.
- Coordinator of the Algorithms and Data Structures group of the Ibero-American Network on Software Technology (RITOS), 1992-1997.
- Coordinator of UNESCO courses in Informatics in Bolivia, Perú, Ecuador, Panamá, Paraguay and Chile, 1995-97.
- Coordinator for an IFIP project to support electronic networks in Bolivia and Peru, 1993-94.

9 Patents

1. Ricardo Baeza-Yates and Barbara Poblete. User Query Data Mining and Related Techniques, Yahoo! Inc. and Univ. of Chile, September 2006. USA Patent #7,617,208, granted Nov 10, 2009.
2. Ricardo Baeza-Yates. Techniques for Searching Future Events, Yahoo! Inc. and Univ. of Chile, August 2006. USA Patent #7,668,813, granted Feb 23, 2010.
3. Luciano Barbosa, Flavio Junqueira, Vassilis Plachouras, Ricardo Baeza-Yates. Method and System for Quantifying the Quality of Search Results based on Cohesion, Yahoo! Inc., December 2007. USA patent #7,720,870, granted May 18, 2010.
4. Ricardo Baeza-Yates, Aristides Gionis, Flavio Junqueira and Vassilis Plachouras. System and Method for Caching Posting Lists, Yahoo! Inc., October 2007. USA Patent #7,890,488, granted Feb 5, 2011.
5. Ricardo Baeza-Yates, Alessandro Tiberi. Extracting Semantic Relations from Query Logs, Yahoo! Inc., December 2007. USA Patent #7,895,235, granted Feb 22, 2011.
6. Ricardo Baeza-Yates, Aristidis Gionis, Flavio Junqueira, Vassilis Plachouras and Luca Telloli. System and Methodology for a Multi-Site Search Engine, Yahoo! Inc., October 2008. USA patent #8,095,545, granted January 10, 2012.

7. Barbara Poblete, Ricardo Baeza-Yates. Classifying Documents using Implicit Feedback and Query Patterns, Yahoo! Inc., July 2008. USA patent # 8,645,369, granted February 4, 2014.

8. Barbara Poblete, Ricardo Baeza-Yates. Methods for Web Site Analysis, Yahoo! Inc., April 2010. USA patent #8,751,632, granted June 10, 2014.

9. Fabrizio Silvestri, Ricardo Baeza-Yates, Beverly Harrison, Di Jiang. Predicting the Next Application that You are going to Use on Aviate, Yahoo! Inc., December 2014. USA Patent 9971972B2, granted May 15, 2018.

10. Lizi Zhang, Hongbo Deng, Amit Goyal, Yi Chang, Ricardo Baeza-Yates. Computerized System and Method for Search Query Auto-completion, Yahoo! Inc, September 2015. USA Patent #10049149B2, granted August 14, 2018.

11. Manjana Chandrasekharan, Keiko Horiguchi, Amanda Stent, Ricardo Baeza-Yates, Jeffrey Kuwano, Achint Thomas, Yi Chang. Audio Verification, Yahoo! Inc., September 2015. USA Patent #10277581B2, granted April 30, 2019.

12. Ricardo Baeza-Yates, Berkant Barla Cambazoglu, Darshan M. Shankaralingappa, Matteo Catena. Pipeline for Document Scoring, NTENT, September 2019. USA Patent #11436235, granted Septiember 6, 2022.

10 Research Projects

At Yahoo Labs I was involved in many internal applied research projects in several areas, including web search, computational advertising (sponsored search and native), web usage data mining, and social media analytics. They included many aspects, in particular efficiency and scalability.

I have coordinated or participated in EU Research Projects, Ibero-American Research Projects and National Spanish and Chilean Research Projects.

The following are publicly funded research projects:

- Table-as-Query: Unifying Data Discovery and Alignment. NSF Medium Grant IIS-1956096. PIs: Reneé Miller, Mirek Riedewald, Wolfgang Gatterbauer. Key senior researcher, 7/2020-6/2023.
- Privacy Alerts: Would be possible to empower online social network users with tools such that they control the privacy of their data?, Ministry of Science and Innovation, Spain, 2015 (TIN2013-49814-EXP). Project co-leader.
- Understanding Social Media: An Integrated Data Mining Approach, Ministry of Science and Innovation, Spain, 2013-2015 (TIN2012-38741). Project Leader.
- Social Media CENIT Project. Industrial research project involving several companies coordinated by Yahoo! Spain, Ministry of Industry, Spain, 2010-13. Project leader.
- HIPERGRAPH: High Performance processing of large data represented as Graphs. Ministry of Science and Innovation, Spain, 2009-2013 (TIN2009-14560-C03-01). Coordinated project between Pompeu Fabra Univ., Polytechnic Univ. of Catalonia and Univ. of A Coruña. Project leader.

- SEMEDIA (Search Environments for Media), STREP project of the VI Research Framework of the European Union, 2007-2009. Project leader.
- WEBMIN: A Platform for Web Mining, Ministry of Education and Science, Spain, 2006-2008. Project leader.
- Web Mining Research Group, Universitat Pompeu Fabra, AGAUR (Catalonia Government), 2006-2008. Project leader.
- A modular and extensible platform for Web mining, Ministry of Education and Science, Spain, 2005-2006. Project Leader.
- Functional Genomics in Nectarines, Chilean Genomics Program, 2004-2006. Project leader: Ariel Orellana. I was in charge of creating and leading the first two years of the bioinformatics group of the project.
- Center for Web Research (www.cwr.cl), Millennium Nucleus, Mideplan, Chile, 2002-2005. Project leader. This was the first large grant awarded to computer science in Chile.
- Intelligent Multimedia Information Retrieval in the Net, ALFA Project (EU-Latinamerican Cooperation), 2004-2005. Project co-leader with Vicente López.
- Web Mining, CONICYT (Chilean National Science Funding), 2002-2003. Project leader.
- Pattern Matching and Applications. Project ECOS-CONICYT with Univ. Marne-la-Vallee, Paris, France, 2000-2002. Project co-leader with Maxime Crochemore.
- Design and Analysis of Sequential and Parallel Algorithms with Applications, CONICYT (Chilean National Science Funding), 1999-2001. Project leader.
- Exchange of Postgraduates in Parallel and Distributed Processing (PARNET), ALFA Project (EU-Latinamerican Cooperation), 1999-2003. Project leader: Claude Giralt. This project involved six countries and I was the leader of the Chilean counterpart.
- Environment for Manipulation and Retrieval of Information in WWW (AMYRI), CYTED (Iberoamerican countries), 1997-1999. Project leader.
- Infocommunication in Broadband Networks, FONDEF (Chilean fund for technology transfer), 1997-1999 (Project leader: Eduardo Vera). This was part of the AccessNova program between NTT Japan and the University of Chile which started in 1995.
- Parallelism and search. Cooperation project Chile-Catalunya with Polytechnic Univ. of Catalunya, Barcelona, 1997. Project co-leader with Joaquim Gabarró.
- Applications on Broadband Networks. Project ECOS-CONICYT with Univ. Joseph Fourier, Grenoble, 1996-98. Project co-leader with Jacques Lamordant.
- Data Structures: Design, Analysis and Applications, CONICYT (Chilean National Science Funding), 1995-98. Project leader.

- Collaborative Systems: User Interfaces, CONICYT (Chilean National Science Funding), 1994-99. Co-researcher (Project leader: José Pino).
- Textual Databases: Algorithms, Interfaces and Applications, CONICYT (Chilean National Science Funding), 1993-94. Project leader.
- Visualization Tecniques for Software Design, Fifth Centennial (Spain), 1993-95. Project co-leader with Gonzalo León, Polytechnic Univ. of Madrid.
- Algorithms for Text Processing, Fundación Andes, Chile-Brazil cooperation program (with Univ. of Campinas and Univ. Fed. of Minas Gerais), 1993-94. Project leader.
- Collaborative Systems, CONICYT (Chilean National Science Funding), 1992-1993. Co-researcher (Project leader: José Pino).
- Program Visualization, CONICYT (Chilean National Science Funding), 1991-1992. Project leader.
- Evaluation of Graphical User Interface Toolkits, DTI (University of Chile Funding), 1991-1992. Project leader.
- Integrated Software with Graphical Interfaces for Text Processing, Fundación Andes C-11001, 1990-1992. Project leader.
- New Oxford English Dictionary Project, University of Waterloo, 1987-1989. Research Assistant (Project leaders: Gaston Gonnet & Frank Tompa).
- Design and Analysis of Data Structures for Dictionary Implementation, Chilean National Science Funding 1153/85, 1985-86. Research Assistant (Project leader: Patricio Poblete).
- Data Structures for Storing and Retrieving Information, University of Chile, E 1949-8522, 1985. Research Assistant (Project leader: Patricio Poblete).

11 Citations

According to Google Scholar there are more than 53,300 citations to more than 600 publications found (December 2022), with an h-index of 89. Citations below are mainly from this source (see my personal entry). I am the most cited in algorithms and data structures, 2nd most cited in web search, the 4th most cited in web mining, and 12th most cited in information retrieval.

In December 2022, the ACM Digital Library had more than 8,700 citations to more than 320 publications, with more than 9,100 downloads in the previous 12 months and 112,000 overall.

In May 2012, CiteSeerX found more than 5,380 independent citations and ranked me the 528th most cited author in CS from a universe of more than 800 thousand authors (since then has not been updated). In their statistics my information retrieval book is the third most cited work of 1999 and the 86th most cited overall (2015).

On March 2020, Microsoft Academic Search had 487 of my publications with almost 44,000 citations. I appear in 16th place in information retrieval and 42nd place in web related research.

12 Publication Record

Papers with at least 100 citations in Google Scholar and 1,000 downloads in the ACM Digital Library are highlighted. Note that short papers, most posters and papers in regional and national conferences have been omitted.

12.1 Books

[1] O. Alonso and R. Baeza-Yates (editors). Information Retrieval: Advanced Topics and Techniques. ACM Press, to appear.

[2] B.B. Cambazoglu and R. Baeza-Yates. *Scalability Challenges in Web Search Engines*, in Synthesis Lectures on Information Concepts, Retrieval, and Services (Gary Marchionini, editor). Morgan & Claypool Publishers, USA, 122 pages, 2015.

[3] R. Baeza-Yates and B. Ribeiro-Neto. *Modern Information Retrieval: the concepts and technology behind search*, second edition. Addison-Wesley, UK, 913 pages, 2011. This edition won the 2012 ASIS&T Book of the Year award and has been already translated to Chinese (2012, 672 pages) and the 10 main chapters to Portuguese (2013, 614 pages). Part of the book is available at mir2ed.org. The first edition was published by ACM Press/Addison-Wesley, UK, 513 pages, in 1999, and was translated to Chinese and Korean and printed in special editions for China and India. According to CiteseerX in 2015 this is the third most cited CS work published in 1999 and the 86th overall. More than **22,000** citations.

[4] G.H. Gonnet and R. Baeza-Yates. *Handbook of Algorithms and Data Structures - In Pascal and C*. Addison-Wesley, Wokingham, UK, 424 pages, 1991. (second edition). Source code is available in my personal WWW page. More than **980** citations.

[5] M. Melucci and R. Baeza-Yates, editors. *Advanced Information Retrieval*, Springer, Berlin, 2011. Based in the European IR summer school organized in Padova, 2009.

[6] I. King and R. Baeza-Yates, editors. *Weaving Services and People on the World Wide Web*, Springer, Berlin, 2009. Selection of papers presented at the Workshop Track of the 17th International World Wide Web Conference (WWW 2008) held at Beijing, China, 2008.

[7] R. Baeza-Yates, J. Glaz, H. Gzyl, J. Hüsler, and J.L. Palacios, editors. *Applied Probability: Recent Advances*, Kluwer Academic Publishers, 2004.

[8] R. Peña, R. Baeza-Yates and J.V. Rodriguez Muñoz, *Digital management of information: from bits to digital libraries and the Web* (In Spanish: Gestión digital de la Información: de bits a bibliotecas digitales y la Web), ISBN: 84-7897-514-4. Ra-Ma, Spain, 2002.

[9] W. Frakes and R. Baeza-Yates, editors. *Information Retrieval: Data Structures and Algorithms*. Prentice-Hall, Englewood Cliffs, NJ, USA, 504 pages, 1992. Source code is available in my personal WWW page. More than **3,900** citations.

12.2 Editor of Proceedings

[1] Marc Spaniol, Ricardo Baeza-Yates, Omar Alonso. Proc. of the 13th Temporal Web Analytics Workshop (TempWeb). TheWebConf 2023 (WWW Companion Volume), Austin, USA, May 2023.

[2] Omar Alonso, Ricardo Baeza-Yates, Tracy Holloway King, Gianmaria Silvello. Proceedings of the Third International Conference on Design of Experimental Search & Information REtrieval Systems, CEUR Workshop Proceedings 3480, San Jose, USA, August 30-31, 2022.

[3] Marc Spaniol, Ricardo Baeza-Yates, Omar Alonso. Proc. of the 12th Temporal Web Analytics Workshop (TempWeb). TheWebConf 2022 (WWW Companion Volume), Lyon, France, Apr 2022.

[4] Marc Spaniol, Ricardo Baeza-Yates, Omar Alonso. Proc. of the 11th Temporal Web Analytics Workshop (TempWeb). TheWebConf 2021 (WWW Companion Volume), Ljubljana, Slovenia, Apr 2021.

[5] Marc Spaniol, Ricardo Baeza-Yates, Julien Masanès. Proc. of the 10th Temporal Web Analytics Workshop (TempWeb). TheWebConf 2020 (WWW Companion Volume), Taipei, Taiwan, Apr 2020.

[6] Marc Spaniol, Ricardo Baeza-Yates, Julien Masanès. The 9th Temporal Web Analytics Workshop (TempWeb'19). WWW (Companion Volume), San Francisco, USA, May 2019.

[7] Ling Liu, Ryen W. White, Amin Mantrach, Fabrizio Silvestri, Julian J. McAuley, Ricardo Baeza-Yates, Leila Zia. The World Wide Web Conference (WWW 2019), ISBN 978-1-4503-6674-8, ACM Press, San Francisco, CA, USA, May 2019.

[8] Sihem Amer-Yahia, Mohammad Mahdian, Ashish Goel, Geert-Jan Houben, Kristina Lerman, Julian J. McAuley, Ricardo Baeza-Yates, Leila Zia. Companion of The 2019 World Wide Web Conference (WWW 2019), ISBN 978-1-4503-6675-5, ACM Press , San Francisco, CA, USA, May 2019.

[9] Leman Akoglu, Emilio Ferrara, Mallayya Deivamani, Ricardo Baeza-Yates, Palanisamy Yogesh. Advances in Data Science, 3rd ICIIT, Springer CCIS 941, Chennai, India, Dec 2018.

[10] Marc Spaniol, Ricardo Baeza-Yates, Julien Masanès. The 8th Temporal Web Analytics Workshop (TempWeb'18). WWW (Companion Volume), Lyon, France, Apr 2018.

[11] Jian-Yun Nie, Zoran Obradovic, Toyotaro Suzumura, Rumi Ghosh, Raghunath Nambiar, Chonggang Wang, Hui Zang, Ricardo A. Baeza-Yates, Xiaohua Hu, Jeremy Kepner, Alfredo Cuzzocrea, Jian Tang, Masashi Toyoda. 2017 IEEE International Conference on Big Data, Boston, MA, USA, Dec 2017.

[12] Ana Freire, Ricardo Baeza-Yates. Seventh BCS-IRSG Symposium on Future Directions in Information Access, FDIA 2017, Sept 2017, Barcelona, Spain. Workshops in Computing, BCS 2017.

[13] Marc Spaniol, Ricardo Baeza-Yates, Julien Masanès. The 7th Temporal Web Analytics Workshop (TempWeb'17). WWW (Companion Volume), Perth, Australia, Apr 2017.

[14] Francesco Bonchi, Josep Domingo-Ferrer, Ricardo Baeza-Yates, Zhi-Hua Zhou, Xindong Wu. IEEE 16th International Conference on Data Mining, Barcelona, Spain, Dec 2016.

[15] Carlotta Domeniconi, Francesco Gullo, Francesco Bonchi, Josep Domingo-Ferrer, Ricardo Baeza-Yates, Zhi-Hua Zhou, Xindong Wu. IEEE International Conference on Data Mining Workshops, Barcelona, Spain, Dec 2016.

[16] Marc Spaniol, Julien Masanès, Ricardo Baeza-Yates. The 6th Temporal Web Analytics Workshop (TempWeb'16). WWW (Companion Volume), Montreal, Apr 2016.

[17] Ricardo Baeza-Yates, Mounia Lalmas, Alistair Moffat, Berthier Ribeiro-Neto. Proceedings of the 38th International ACM SIGIR Conference on Research and Development in Information Retrieval, Santiago, Chile, August 9-13, 2015.

[18] Marc Spaniol, Julien Masanès, Ricardo Baeza-Yates. The 5th temporal web analytics workshop (TempWeb'15). WWW (Companion Volume) 2015.

[19] Marc Spaniol, Julien Masanès, Ricardo Baeza-Yates. The 4th temporal web analytics workshop (TempWeb'14). WWW (Companion Volume) 2014, 863–864.

[20] Xiaohua Hu, Tsau Young Lin, Vijay Raghavan, Benjamin W. Wah, Ricardo A. Baeza-Yates, Geoffrey Fox, Cyrus Shahabi, Matthew Smith, Qiang Yang, Rayid Ghani, Wei Fan, Ronny Lempel, Raghunath Nambiar (Eds.). *Proceedings of the 2013 IEEE International Conference on Big Data*, IEEE CS Press, Santa Clara, CA, USA, Oct 2013 (ISBN 978-1-4799-1292-6).

[21] Daniel Schwabe, Virgílio Almeida, Hartmut Glaser, Ricardo Baeza-Yates, Sue Moon (Eds.). *22nd International World Wide Web Conference, WWW '13*, ACM Press, Rio de Janeiro, Brazil, May, 2013.

[22] Ricardo Baeza-Yates, Liliana Calderón-Benavides, Cristina González-Caro, Alejandro Jaimes, Woldgang Nejdl. *Proceedings of the 8th Latin-American Web Conference - LA-WEB 2012*, CPS, Cartagena de Indias, Colombia, Oct 2012.

[23] Ricardo Baeza-Yates, Stefano Ceri, Piero Fraternali, Fausto Giunchiglia. *Proc. of the First International Workshop on Crowdsourcing Web Search*, Lyon, France, April 17, CEUR-WS.org, 2012.

[24] Ricardo Baeza-Yates, Julien Masanès, Marc Spaniol. *Proc. of the 2nd Temporal Web Analytics Workshop, TempWeb '12*, ACM Press, Lyon, France, April 16-17, 2012.

[25] Ricardo Baeza-Yates, Arjen P. de Vries, Hugo Zaragoza, B. Barla Cambazoglu, Vanessa Murdock, Ronny Lempel, and Fabrizio Silvestri. *Proceedings of the 34th European Conference in Information Retrieval - ECIR 2012*, LNCS 7224, Springer, Barcelona, Spain, Apr 2012.

[26] Wei-Ying Ma, Jian-Yun Nie, Ricardo Baeza-Yates, Tat-Seng Chua, and W. Bruce Croft. *Proceedings of the 34th International ACM SIGIR Conference on Research and Development in Information Retrieval - SIGIR 2011*, ACM Press, Beijing, China, Jul 2011.

[27] Lada A. Adamic, Ricardo Baeza-Yates, Scott Counts. *Proceedings of the Fifth International Conference on Weblogs and Social Media*, AAAI Press, Barcelona, Catalonia, Spain, July 17-21, 2011.

[28] Ricardo Baeza-Yates, Julien Masanès, Marc Spaniol. *Proceedings of the 1st temporal web analytics workshop (TWAW)*. WWW 2011 (Companion Volume), Hyderabad, India, 2011.

[29] Ricardo Baeza-Yates, Paolo Boldi, Berthier Ribeiro-Neto, Berkant Barla Cambazoglu. *Proceedings of the Second ACM Conference on Web Search and Web Data Mining - WSDM 2009*, Barcelona, Spain, ACM Press, Feb 2009.

[30] Ricardo Baeza-Yates, Wagner Meira Jr., Luis Olsina. *Proceedings of 6th Latin American Web Congress - LA-WEB 2008*, Vila Velha, Brazil, IEEE CS Press, Oct 2008 (CD-ROM).

[31] Mário J. Silva, Alberto H. F. Laender, Ricardo Baeza-Yates, Deborah L. McGuinness, Bjorn Olstad, Oystein Haug Olsen, André O. Falcão. *Proceedings of the Sixteenth ACM Conference on Information and Knowledge Management, CIKM 2007*, Lisbon, Portugal, November 6-10, 2007 ACM 2007.

[32] Virgilio Almeida, Ricardo Baeza-Yates. *Proceedings of 5th Latin American Web Congress - LA-WEB 2007*, Santiago, Chile, IEEE CS Press, Oct 31-Nov 2, 2007.

[33] Nivio Ziviani, Ricardo Baeza-Yates. *Proceedings of 14th Int. Symposium on String Processing and Information Retrieval - SPIRE 2007*, Santiago, Chile, Springer, LNCS 4726, October 29-31, 2007.

[34] R. Baeza-Yates, N. Ziviani, G. Marchionini, A. Moffat, and J. Tait. *Proceedings of SIGIR 2005*, ACM Press, Salvador, Brazil, August 2005.

[35] R. Baeza-Yates, J.L. Marroquín, and E. Chávez, *Proceedings of ENC (Mexican CS Conference)*, IEEE CS Press, Colima, Mexico, September 2004 (422 pages).

[36] R. Baeza-Yates, D. Schwabe, J. Piquer, N. Ziviani, L. Olsina, *Proceedings of LA-WEB*, IEEE CS Press, Santiago, Chile, November 2003.

[37] R. Baeza-Yates, E. Chávez, M. Crochemore: Combinatorial Pattern Matching *Proc. 14th Annual Symposium in Combinatorial Pattern Matching* (CPM 2003), LNCS 2676, Springer, Morelia, Michoacán, Mexico, June 25-27, 2003.

[38] R. Baeza-Yates, Ugo Montanari, and N. Santoro. *Foundations of Information Technology in the Era of Network and Mobile Computing (Proc. II IFIP Theoretical Computer Science Symposium)*, Kluwer, August 2002 (held in Montreal, Canada).

[39] Kalervo Järvelin, Micheline Beaulieu, Ricardo Baeza-Yates, Sung Hyon Myaeng. *Proc. 25th ACM SIGIR*, ACM Press, August 2002 (held in Tampere, Finland).

[40] R. Baeza-Yates. *Proc. XXI Int. Conf. of the Chilean Computer Science Society*. IEEE CS Press, November 2001 (held in Punta Arenas, Chile).

[41] R. Baeza-Yates. *Proc. XVII Int. Conf. of the Chilean Computer Science Society*. IEEE CS Press, November 1997 (held in Valparaíso, Chile).

[42] B. Sarikaya and R. Baeza-Yates. *Proc. IEEE Conference on Protocols for Multimedia Systems and Multimedia Networking*. IEEE CS Press, November 1997 (held in Santiago, Chile).

[43] R. Baeza-Yates. *Proc. IV South American Workshop on String Processing*, volume 8 of *Informatics*. Carleton University Press, November 1997 (held in Valparaíso, Chile).

[44] N. Ziviani, R. Baeza-Yates, and K. Guimarães. *Proc. III South American Workshop on String Processing*, volume 4 of *Informatics*. Carleton University Press, August 1996 (held in Recife, Brazil).

[45] R. Baeza-Yates, E. Goles, and P.V. Poblete. *LATIN'95: II Symposium on Latinamerican Theoretical Informatics*. Number 911 in Lecture Notes in Computer Science. Springer Verlag, Heidelberg, Germany, April 1995 (held in Valparaíso, Chile).

[46] R. Baeza-Yates and U. Manber. *Proc. II South American Workshop on String Processing*. April 1995 (held in Valparaíso, Chile).

[47] R. Baeza-Yates. *Computer Science Research 2: Proc. XIII Int. Conf. of the Chilean Computer Science Society*. Plenum Press, 1994 (held in La Serena, Chile, Oct 1993).

[48] R. Baeza-Yates and N. Ziviani. *Proc. I South American Workshop on String Processing*. October 1993 (held in Belo Horizonte, Brazil).

[49] R. Baeza-Yates and U. Manber. *Computer Science Research: Proceedings XI Int. Conf. of the Chilean Computer Science Society*. Plenum Press, 1992 (held in Santiago, Oct 1991).

12.3 Editor of Journal Issues

[1] Venkat Gudivada, Ricardo Baeza-Yates, Vijay Raghavan. Special Issue on Big Data Management: Promises and Problems. IEEE Computer 48(3), March, 2015.

[2] Ricardo Baeza-Yates, Gabriella Pasi. Special issue on Web Mining for Search. Journal of Information Retrieval 14(3), 213-214, 2011.

[3] Ricardo Baeza-Yates, Alberto H. F. Laender, Deborah L. McGuinness. Special issue on CIKM 2007. Information Systems 34, issue 8, Dec 2009. Preface in pages 671-2.

[4] Alberto Apostolico, Ricardo Baeza-Yates, Massimo Melucci. Special issue on 2004 Symposium on String Processing and Information Retrieval. Journal of Discrete Algorithms 5, Issue 2, June 2007, 203-249. Preface in page 203.

[5] Ricardo Baeza-Yates, Paolo Boldi and José-María Gómez-Hidalgo. Next Generation Web Search. Upgrade, February 2007 (Vol. VIII, issue no. 1). URL: http://www.upgrade-cepis.org/issues/2007/1/upgrade-vol-VIII-1.html. In Spanish in Novática 185, 2007.

[6] Alberto Apostolico, Ricardo Baeza-Yates, Massimo Melucci. Special issue on IR for SPIRE 2004, Information Systems 31 (7), 2006, 66pp. Preface in pages 569-572.

[7] Ricardo Baeza-Yates, Norbert Fuhr, Yoelle Maarek, editors. Special issue on XML Retrieval, ACM Transactions on Information Systems (TOIS), Volume 24 (4), October 2006.

[8] Ricardo Baeza-Yates and Maxime Crochemore, editors. Special issue on Combinatorial Pattern Matching, Journal of Discrete Algorithms 3 (2-4), Elsevier, Jun 2005, 480 pp.

[9] Ricardo Baeza-Yates, editor. Special Issue on LA-WEB 2003, Journal of Web Engineering 2 (4), October 2004.

[10] Ricardo Baeza-Yates and Peter Schaüble, editors. Special issue in Information Retrieval and the Web. Upgrade (English) and Novática 157 (Spanish), May-Jun 2002.

[11] R. Baeza-Yates, D. Carmel, Y. Maarek and A. Sofer. Special Issue in *XML and Information Retrieval*, Journal of American Society on Information Systems and Technology 53(6): 2002.

[12] R. Baeza-Yates and E. Goles. Special Issue in *Latin American Theoretical Informatics*, Theoretical Computer Science 181 (1), July 1997 (225 pages).

[13] R. Baeza-Yates and N. Ziviani. Special issue in *String Processing Algorithms*, Journal of the Brazilian Computer Society 1 (3), April 1995.

12.4 Chapters in Books

[1] Ricardo Baeza-Yates, Leena Murgai, Shiran Dudy. Bias in Retrieval Systems. In *Information Retrieval: Advanced Topics and Techniques*. Editors: O. Alonso and R. Baeza-Yates, ACM Press, to appear.

[2] Ricardo Baeza-Yates, Leena Murgai. Bias and the Web. In *Introduction to Digital Humanism*: 435-462. Editors: Hannes Werthner, Carlo Ghezzi, Jeff Kramer, Julian Nida-Rümelin, Bashar Nuseibeh, Erich Prem, Allison Stanger. Springer, 2024.

[3] P. Mika, R. Baeza-Yates. The Impact of the Web on Information Retrieval. In *Linking the World's Information: Essays on Tim Berners-Lee's Invention of the World Wide Web*. O. Seneviratne, J. Hendler, editors. ACM Books, New York, NY, USA, pp. 105–114, Sep 2023.

[4] Ricardo Baeza-Yates, Usama M. Fayyad. The Attention Economy and the Impact of Artificial Intelligence. In *Perspectives on Digital Humanism*: 123-134. Editors: Hannes Werthner, Erich Prem, Edward A. Lee, Carlo Ghezzi. Springer 2022

[5] L. Devillers, F. Fogelman-Soulié, R. Baeza-Yates. AI and Human Values: Inequalities, Biases, Fairness, Nudge and Feedback Loops. In *Reflections on AI for Humanity*. B. Braunschweig, M. Ghallab, editors. LNAI 12600, Springer, pp. 66–89, 2021.

[6] M. Rauschenberger, R. Baeza-Yates, and L. Rello. Technologies for Dyslexia (Chapter 31). In *Web Accessibility*, 2nd edition. S. Harper and Y. Yezilada, editors. Springer, pp. 603–627, 2019.

[7] R. Baeza-Yates, R. Blanco, M. Castellanos. Web Text Mining. In *The Oxford Handbook of Computational Linguistics*, 2nd edition, R. Mitkow, editor. Oxford Press, 2016.

[8] J. Lehmann, M. Lalmas, and R. Baeza- Yates. Measuring Inter-Site Engagement.In *Handbook of Statistics: Big Data Analytics*, V. Govinderaju, V. V. Raghavan and C. R. Rao, editors. Volume 33. Elsevier, 2015.

[9] R. Baeza-Yates and Y. Maarek. Usage Data in Web Search: Benefits and Limitations. In *Scientific and Statistical Database Management: 24th SSDBM*, A. Ailamaki and S. Bowers (eds). LNCS 7338, Springer, Chania, Crete, 495–506, June 2012.

[10] R. Baeza-Yates, A. Broder and Y. Maarek. The new frontier of Web Search Technology: Seven challenges. In *Search Computing – Trends and Developments*, S. Ceri and M. Brambilla (eds). LNCS 6585, Springer, Berlin, 2011.

[11] B.B. Cambazoglu, R. Baeza-Yates. Scalability Challenges in Web Search Engines. In *Advanced Topics in Information Retrieval*, M. Melucci and R. Baeza-Yates (eds), Springer, 27-50, 2011.

[12] Ricardo Baeza-Yates, Paolo Boldi, Alessandro Bozzon, Marco Brambilla, Stefano Ceri, Gabriella Pasi. Trends in Search Interaction. In *Search Computing – Trends and Developments*, S. Ceri and M. Brambilla (eds). LNCS 6585, Springer, Berlin, 2011.

[13] Ricardo Baeza-Yates, Paolo Boldi. Web Structure Mining. In *Advanced Techniques in Web Intelligence*, edited by Juan Velásquez and Lakhmi Jain, Springer, pp. 113-142, 2010.

[14] Ricardo Baeza-Yates. Privacy in Query Logs. In *Web Intelligence and Security*, edited by M. Last and A. Kandel. IOS Press, pp. 189-193, 2010.

[15] Ricardo Baeza-Yates, Alejandro Salinger. Fast Intersection Algorithms for Sorted Sequences. In *Algorithms and Applications 2010: Essays Dedicated to Esko Ukkonen on the Occasion of His 60th Birthday*, edited by Tapio Elomaa, Heikki Mannila, Pekka Orponen. Springer LNCS 6060, pp. 45–61, 2010.

[16] Ricardo Baeza-Yates, Rosie Jones, Barbara Poblete, Myra Spiliopoulou. Issues with Privacy Preservation in Query Log Mining. In *Privacy-Aware Knowledge Discovery: Novel Applications and New Techniques*, edited by Francesco Bonchi and Elena Ferrari. Chapman and Hall/CRC Press, pp. 353–368, 2010.

[17] Ricardo Baeza-Yates, Prabhakar Raghavan. Next Generation Web Search. In *Search Computing - Challenges and Directions*, edited by S. Ceri and M. Brambilla, LNCS 5950, Springer, pp. 11-23, 2010.

[18] Carlos Castillo, Ricardo Baeza-Yates. Web Retrieval and Mining. In *Encyclopedia of Library and Information Sciences*, Taylor and Francis, USA, 2009.

[19] David Nettleton, Liliana Calderón and Ricardo Baeza-Yates. Analysis of Web Search Engine Query Session and Clicked Documents. In *Advances in Web Mining and Web Usage Analysis - 8th International Workshop on Knowledge Discovery on the Web, WEBKDD 2006, Revised Papers*, Springer Lecture Notes in Computer Science (LNCS/LNAI), Vol. 4811, O. Nasraoui, M. Spiliopoulou, J. Srivastava, B. Mobasher, B. Masand (Eds), 207–226, 2007.

[20] Ricardo Baeza-Yates, Alvaro Pereira, Nivio Ziviani. Understanding Content Reuse on the Web: Static and Dynamic Analyses. In *Advances in Web Mining and Web Usage Analysis - 8th International Workshop on Knowledge Discovery on the Web, WEBKDD 2006, Revised Papers*, Springer Lecture Notes in Computer Science (LNCS/LNAI), Vol. 4811, O. Nasraoui, M. Spiliopoulou, J. Srivastava, B. Mobasher, B. Masand (Eds), 227–236, 2007.

[21] Ricardo Baeza-Yates, Carlos Castillo and Vicente López. Pagerank Increase under Different Collusion Topologies. In *Internet Search Engines*, Ravi Kumar Jain B, editor, Icfai University Press, India, 163–183, 2007.

[22] Ricardo Baeza-Yates and Barbara Poblete. A Website Mining Model Centered on User Queries. In *Semantics, Web and Mining*, M. Ackermann et al. (Eds.): EWMF/KDO 2005, Springer LNAI 4289, pp. 1–17, 2006.

[23] Mari Carmen Marcos, Ricardo Baeza-Yates and Andres Ardila. CHILE: A Visual Library Catalog Retrieval Prototype. In *HCI Related Papers of Interacción 2004*. Raquel Navarro-Prieto and Jesús Lorés (editors), Springer, The Netherlands, 2006, 205-216.

[24] Ricardo Baeza-Yates and Carlos Castillo. Web Searching. In *Encyclopedia of Language and Linguistics*, 2nd edition. Graeme Hirst (editor), Vol. 13, Elsevier: Oxford, 2005, 527-537.

[25] R. Baeza-Yates and G. Navarro. Text Searching: Theory and Practice. In *Formal Languages and Applications*, Carlos Martin-Vide, Victor Mitrana, Gheorghe Paun (Eds.), Studies in Fuzziness and Soft Computing 148, Springer, Berlin, 2004, 565–597.

[26] Ricardo Baeza-Yates. Web Usage Mining in Search Engines. In *Web Mining: Applications and Techniques*, Anthony Scime, editor. Idea Group, 2004, 307–321.

[27] Ricardo Baeza-Yates, Carlos Castillo and Felipe Saint-Jean. Web Dynamics, Structure and Page Quality. In Mark Levene and Alex Poulovassilis (editors), *Web Dynamics*, Springer Verlag, 2004, 93–109.

[28] Ricardo Baeza-Yates and Gonzalo Navarro. Modeling Text Collections and Its Application to the Web. In *Applied Probability: Recent Advances*, Ricardo Baeza-Yates, Joe Glaz, Henryk Gzyl, Juerg Huesler, and Jose Luis Palacios (editors), Kluwer Academic Publishers, 2004.

[29] Ricardo Baeza-Yates, Benjamin Bustos, Edgar Chavez, Norma Herrera, and Gonzalo Navarro. Clustering in Metric Spaces and Its Application to Information Retrieval. In Weili Wu and Hui Xiong (editors), *Clustering and Information Retrieval*. Kluwer Academic Publishers, 2003, 1–34.

[30] Ricardo Baeza-Yates, Alistair Moffat and Gonzalo Navarro. Searching Large Text Collections. In J. Abello, P. Pardalos and M. Resende (editors), *Handbook of Massive Data Sets*, Kluwer Academic Publishers, 2002, pages 195-244.

[31] R. Baeza-Yates and P. Poblete. Searching. In Mikhail Atallah, editor, *Handbook on Algorithms and Theory of Computation*, chapter 2. CRC Press, 1999. A revised version appears in the first volume of the second edition published in 2009 and also edited by Marina Blanton.

[32] R. Baeza-Yates. Searching: An algorithmic tour. In Allen Kent and James G. Williams, editors, *Encyclopedia of Computer Science and Technology*, volume 37, pages 331–359. Marcel Dekker, Inc., 1997.

[33] R. Baeza-Yates, G. Quezada, and G. Valmadre. Visual debugging and automatic animation of C programs. In Peter Eades and Kang Zhang, editors, *Software Visualisation*, volume 7 of *Software and Knowledge Engineering*, chapter 3, pages 46–58. World Scientific, 1996.

[34] R. Baeza-Yates. Introduction to data structures and algorithms related to information retrieval. In W. Frakes and R. Baeza-Yates, editors, *Information Retrieval: Algorithms and Data Structures*, chapter 2, pages 13–27. Prentice-Hall, 1992. More than **100** citations.

[35] D. Harman, E. Fox, R. Baeza-Yates, and W. Lee. Inverted files. In W. Frakes and R. Baeza-Yates, editors, *Information Retrieval: Algorithms and Data Structures*, chapter 3, pages 28–43. Prentice-Hall, 1992. More than **240** citations.

[36] G.H. Gonnet, R. Baeza-Yates, and T. Snider. New indices for text: PAT trees and PAT arrays. In W. Frakes and R. Baeza-Yates, editors, *Information Retrieval: Algorithms and Data Structures*, chapter 5, pages 66–82. Prentice-Hall, 1992. More than **520** citations.

[37] R. Baeza-Yates. String searching algorithms. In W. Frakes and R. Baeza-Yates, editors, *Information Retrieval: Algorithms and Data Structures*, chapter 10, pages 219–240. Prentice-Hall, 1992.

12.5 International Journals

[1] Ricardo Baeza-Yates, Usama M. Fayyad. Responsible AI: An Urgent Mandate. *IEEE Intelligent Systems* 39 (1), 12-17, 2014.

[2] Kevin Mallinger, Ricardo Baeza-Yates. Responsible AI in Farming: A Multi-Criteria Framework for Sustainable Technology Design. Applied Sciences 14(1), MDPI, Jan 2024.

[3] Oscar Espinosa, Oscar H. Franco, Martha Ospina, Mabel Carabalí, Ricardo Baeza-Yates. The value of mathematical modelling approaches in epidemiology for public health decision making. *Colombian Journal of Anesthesiology* 52(1), January 2024.

[4] Magi Andorra, Ana Freire, Irati Zubizarreta, Nicole Kerlero de Rosbo, Steffan D. Bos, Melanie Rinas, Einar A. Høgestøl, Sigrid A. de Rodez Benavent, Tone Berge, Synne Brune-Ingebretse, Federico Ivaldi, Maria Cellerino, Matteo Pardini, Gemma Vila, Irene Pulido-Valdeolivas, Elena H. Martinez-Lapiscina, Sara Llufriu, Albert Saiz, Yolanda Blanco, Eloy Martinez-Heras, Elisabeth Solana, Priscilla Bäcker-Koduah, Janina Behrens, Joseph Kuchling, Susanna Asseyer, Michael Scheel, Claudia Chien, Hanna Zimmermann, Seyedamirhosein Motamedi, Josef Kauer-Bonin, Alex Brandt, Julio Saez-Rodriguez, Leonidas G. Alexopoulos, Friedemann Paul, Hanne F. Harbo, Hengameh Shams, Jorge Oksenberg, Antonio Uccelli, Ricardo Baeza-Yates, Pablo Villoslada. Predicting disease severity in multiple sclerosis using multimodal data and machine learning. *Journal of Neurology*, November 2023.

[5] Knott, A., Pedreschi, D., Chatila, R., Chakraborti, T., Leavy, S., Baeza-Yates, R., Eyers, D., Trotman, A., Teal, P.D., Biecek, P., Russell, S., Bengio, Y. Generative AI models should include detection mechanisms as a condition for public release. *Ethics and Information Technology* 25, 55, 2023.

[6] Baeza-Yates, R. An Introduction to Responsible AI. *European Review* 31(4):406-421, 2023.

[7] Eva-Maria Schön, Michael Neumann, Christina Hofmann-Stölting, Ricardo Baeza-Yates and Maria Rauschenberger. How are AI Assistants Changing Higher Education? *Frontiers in Computer Science* 5, 2023.

[8] Meike Zehlike, Tom Sür, Ricardo Baeza-Yates, Francesco Bonchi, Carlos Castillo, Sara Hajian. Fair Top-k ranking with multiple protected groups. *Information Processing & Management* 59(1), 2022.

[9] Maria Rauschenberger, Ricardo Baeza-Yates, and Luz Rello. A Universal Screening Tool for Dyslexia by a Web-Game and Machine Learning. *Frontiers in Computer Science* 3, Jan 2022.

[10] Diana Ramírez-Cifuentes, Christina Largeron, Julien Tissier, Ricardo Baeza-Yates, Ana Freire. Enhanced Word Embedding Variations for the Detection of Sustance Abuse and Mental Health Issues on Social Media Writings. *IEEE Access* 9:130449-130471, 2021.

[11] Christian Ebell, Ricardo Baeza-Yates, Richard Benjamins, Hengjin Cai, Mark Coeckelbergh, Tania Duarte, Merve Hickok, Aurelie Jacquet, Angela Kim, Joris Krijger, John MacIntyre, Piyush B. Madhamshettiwar, Lauren Maffeo, Jeanna Matthews, Larry R. Medsker, Peter Smith, Savannah Thais. Towards intellectual freedom in an AI Ethics Global Community. *AI Ethics* 1(2), 131–140, 2021. URL: `https://doi.org/10.1007/s43681-021-00052-5`

[12] Maria Rauschenberger, Ricardo Baeza-Yates, Luz Rello. A Universal Screening Tool for Dyslexia by a Web-Game and Machine Learning. *Frontiers in Computer Science* 3, 2021.

[13] Maria Rauschenberger, Ricardo Baeza-Yates. How to Handle Health-Related Small Imbalanced Data in Machine Learning? *i-com*, 19(3): 215–226, 2020.

[14] Luz Rello, Ricardo Baeza-Yates, Abdullah Ali, Jeffrey P. Bigham, Miquel Serra. Predicting risk of dyslexia with an online gamified test. *Plos One*, Dec 2, 2020. URL: `https://doi.org/10.1371/journal.pone.0241687`

[15] Pablo Villoslada, Ricardo Baeza-Yates, Joseph C. Masdeu. Reclassifying Neurodegenerative Diseases. *Nature Biomedical Engineering*, Aug 2020.

[16] Diana Ramírez-Cifuentes, Ana Freire, Ricardo Baeza-Yates, Joaquim PuntíVidal, Pilar Medina-Bravo, Jordi Gonzalez, Diego A. Velazquez, Josep Maria Gonfaus. Suicide Risk Detection on Social Media: A Multi-modal Approach. *Journal of Medical Internet Research*, Jul 2020.

[17] Ioanna Tsalouchidou, Ricardo Baeza-Yates, Francesco Bonchi, Kewen Liao, Timos Sellis. Temporal Betweenness Centrality in Dynamic Graphs. *International Journal of Data Science and Analytics* 9, 257–272, 2020.

[18] Ioanna Tsalouchidou, Francesco Bonchi, Gianmarco de Francisi Morales, Ricardo Baeza-Yates. Scalable Dynamic Graph Summarization. *IEEE TKDE* 32(2), 360-373, 2020.

[19] Ricardo Baeza-Yates. Bias on the Web. *Communications of ACM* 61(6), pp. 54–61, 2018. More than **530** citations and more than **21,000** downloads.

[20] Ricardo Baeza-Yates, Puneet M. Sangal, Pablo Villoslada. Burden of neurological diseases in the US revealed by web searches. *PLOS ONE*, May, 2017. URL: `\smallhttps://doi.org/10.1371/journal.pone.0178019`

[21] Janette Lehmann, Carlos Castillo, Mounia Lalmas, Ricardo Baeza-Yates. Story-focused Reading in Online News and its Potential for User Engagement. *JASIST* 68(4), pp. 869–883, 2017.

[22] Tayfun Kucukyilmaz, B. Barla Cambazoglu, Cevdet Aykanat, Ricardo Baeza-Yates. A Machine Learning Approach for Result Caching in Web Search Engines. *Information Processing & Management* 53 (4), July 2017, 834-850.

[23] Luz Rello, Ricardo Baeza-Yates. How to Present more Readable Text for People with Dyslexia. *Universal Access in the Information Society* 16(1), pp. 29–49, Springer, 2017.

[24] Luz Rello, Ricardo Baeza-Yates, Joaquim Llisterri. A Resource of Errors Written in Spanish by People with Dyslexia and its Linguistic, Phonetic and Visual Analysis. *Language Resources and Evaluation* 51(2), pp. 379–408, Springer, 2017.

[25] Luz Rello, Ricardo Baeza-Yates. The Effect of Font Type on Screen Readability by People with Dyslexia. *ACM Transactions on Accessibility* 8(4), pp. 1–33, 2016. **Chosen for the Best of Computing Reviews 2016 selection** and **3300** downloads.

[26] Thomas Roelleke, Andreas Kaltenbrunner, Ricardo Baeza-Yates. Harmony Assumptions in Information Retrieval and Social Networks. *The Computer Journal* 58 (11): 2982–2999, 2015.

[27] David Martin-Borregon, Luca Maria Aiello, Przemyslaw Grabowicz, Alejandro Jaimes, Ricardo Baeza-Yates. Characterization of online groups along space, time, and social dimensions. *EPJ Data Science* 3(1): 1–37, 2014.

[28] Sandra Alvarez-García, Ricardo Baeza-Yates, Nieves Brisaboa, Josep-Lluis Larriba-Pey, Oscar Pedreira. Automatic Multi-Partite Graph Generation from Arbitrary Data. *Journal of Systems and Software* 94: 72–86, 2014.

[29] David F. Nettleton, Ricardo Baeza-Yates and Mari-Carmen Marcos. Analysis of the user queries of an e-commerce bookstore in terms of the Library of Congress classification and key publishers. *Information Research* 18(4), Dec 2013.

[30] Luz Rello, Ricardo Baeza-Yates. The Presence of English and Spanish Dyslexia in the Web. *New Review of Hypermedia and Multimedia* 18(3): 131–158, 2012.

[31] Alexandre Francisco, Ricardo Baeza-Yates, Arlindo Oliveira. Mining query log graphs towards a query folksonomy. *Concurrency and Computation: Practice and Experience* 24(17): 2179–2192, 2012.

[32] Donald E. Brown, Fazel Famili, Gerhard Paass, Kate Smith-Miles, Lyn C. Thomas, Richard Weber, Ricardo Baeza-Yates, Cristián Bravo, Gaston L'Huillier and Sebastián Maldonado. Future trends in business analytics and optimization. *Intelligent Data Analysis* 15(6), 1001—17, 2011.

[33] Victor Pascual-Cid, Ricardo Baeza-Yates, Juan Carlos Dürsteler. Visual Web Mining for Website Evaluation. *Journal of Web Engineering* 9(4), 347–368, 2010.

[34] Otávio D. A. Alcântara, Álvaro R. Pereira Jr., Humberto M. de Almeida, Marcos A. Gonçalves, Christian Middleton, Ricardo Baeza-Yates. WCL2R: A Benchmark Collection for Learning to Rank Research with Clickthrough Data. *Journal of Information and Data Management*, Oct 2010.

[35] Barbara Poblete, Myra Spiliopolou, Ricardo Baeza-Yates. Privacy-Preserving Query Log Mining for Business Confidentiality Protection, *ACM Transactions on the Web* 4 (3), 2010.

[36] Mauricio Marín, Verónica Gil-Costa, Carolina Bonacic, Ricardo Baeza-Yates, Issac D. Scherson. Sync/Async Parallel Search for the Efficient Design and Construction of Web Search Engines, *Parallel Computing* 36(4): 153-168, 2010.

[37] Diego Puppin, Raffaele Perego, Fabrizio Silvestri, Ricardo Baeza-Yates. Tuning the Capacity of Search Engines: Load-driven Routing and Incremental Caching to Reduce and Balance the Load, *ACM Transactions on Information Systems* 28 (2), April 2010.

[38] R. Nilo, C. Saffie, K. Lilley, R. Baeza-Yates, V. Cambiazo, R. Campos-Vargas, M. Gonzalez, L.A. Meisel, J. Retamales, H. Silva and A. Orellana. Proteomic analysis of peach fruit mesocarp softening and chilling injury using difference gel electrophoresis (DIGE). *BMC Genomics*, 11–43, 2010. More than **150** citations.

[39] Ricardo Baeza-Yates, Veronique Bruyere, Olivier Delgrange, Rodrigo Scheihing. On the Size of Boyer-Moore Automata, *Theoretical Computer Science A* 410(43), 4432–4443, October 2009.

[40] Bernard Jansen, Thomas J. Flaherty, Ricardo Baeza-Yates, Lee Hunter, Brendan Kitts, and Jamie Murphy. The Components and Impact of Sponsored Search, *IEEE Computer* 42 (5), May 2009, 98–101.

[41] David Nettleton and Ricardo Baeza-Yates. Web Retrieval: Techniques for the Aggregation and Selection of Queries and Answers, *International Journal of Intelligent Systems* 23(12), 1223-1234, 2008.

[42] Ricardo Baeza-Yates, Aristides Gionis, Flavio Junqueira, Vanessa Murdock, Vassilis Plachouras and Fabrizio Silvestri. Design Trade-Offs for Search Engine Caching, special issue in Query Log Analysis, *ACM Transactions on the Web*, 2(4), Article 4, 2008. More than **130** citations.

[43] Ricardo Baeza-Yates and Alessandro Tiberi. The Anatomy of a Large Query Graph. *Journal of Physics A* 41 (22), special issue for STATPHYS23 Satellite Meeting on Complex Networks: from Biology to Information Technology, edited by A. Barrat, S. Boccaletti, G. Caldarelli, A. Chessa, V. Latora and A. Motter, 224002, June 2008.

[44] Luca Becchetti, Carlos Castillo, Debora Donato, Ricardo Baeza-Yates, and Stefano Leonardi. Link Analysis for Web Spam Detection, *ACM Transactions on the Web* 2(1), Article 2, 2008. More than **170** citations and **1,900** downloads.

[45] V. Richard Benjamins, John Davies, Ricardo Baeza-Yates, Peter Mika, Hugo Zaragoza, Mark Greaves, Jose Manuel Gomez-Perez, Jesus Contreras, John Domingue, Dieter Fensel. Near-Term Prospects for Semantic Technologies, R. Benjamins, editor. *IEEE Intelligent Systems* 23 (1), 76–88, Jan-Feb 2008.

[46] Leo Wanner, Ricardo Baeza-Yates, Sören Brügmann, Joan Codina, Barrou Diallo, Enric Escorsa, Mark Giereth, Yiannis Kompatsiaris, Symeon Papadopoulos, Emanuele Pianta, Gemma Piella, Ingo Puhlmann, Gautam Rao, Martin Rotard, Pia Schoester, Luciano Serafini and Vasiliki Zervaki. Towards content-oriented patent document processing. *In World Patent Information* 30 (1), 21–33, 2008. More than **120** citations.

[47] Omar Alonso, Michael Gertz and Ricardo Baeza-Yates. On the Value of Temporal Information in Information Retrieval, *ACM SIGIR Forum* 41(2), 35–41, December 2007. More than **240** citations.

[48] Ricardo Baeza-Yates, Carlos Hurtado and Marcelo Mendoza. Improving Search Engines by Query Clustering, *JASIST* 58(12), 1793–1804, October 2007.

[49] Alistair Moffat, William Webber, Justin Zobel and Ricardo Baeza-Yates. A Pipelined Architecture for Distributed Text Query Evaluation. *Information Retrieval* 10(3):205-231, June 2007. More than **140** citations.

[50] Gabriel Tolosa, Fernando Bordignon, Ricardo Baeza-Yates and Carlos Castillo. Characterization of the Argentinian Web. Cybermetrics 11(1), July 2007.

[51] Ricardo Baeza-Yates, Carlos Castillo and Efthimis N. Efthimiadis: Characterization of National Web Domains. *ACM Transactions on Internet Technology* 7, Issue 2, 2007. More than **170** citations.

[52] Ricardo Baeza-Yates and Carlos Castillo. Crawling the Infinite Web: Five Levels are Enough. *Journal of Web Engineering* 6, 49-72, 2007.

[53] Claudine Badue, Ricardo Baeza-Yates, Berthier Ribeiro-Neto, Artur Ziviani, and Nivio Ziviani. Analyzing Imbalance among Homogeneous Index Servers in a Web Search System. *Information Processing & Management* 43, 592-608, 2007.

[54] Ricardo Baeza-Yates, Paolo Boldi and Carlos Castillo. Generic Damping Functions for Propagating Importance in Link-Based Ranking, *Journal of Internet Mathematics* 3(4), 445-478, 2006.

[55] Reinaldo Campos-Vargas, Oscar Becerra, Ricardo Baeza-Yates, Verónica Cambiazo, Mauricio González, Lee Meisel, Ariel Orellana, Julio Retamales, Herman Silva, and Bruno G. Defilippi: Seasonal Variation in the Development of Chilling Injury in 'O'Henry' Peaches, *Scientia Horticulturae* 110: 79-83, 2006.

[56] Ricardo Baeza-Yates, José Pino. Towards Formal Evaluation of Collaborative Work and Its Application to Information Retrieval. *Information Research*, Volume 11, No 4, July, 2006.

[57] Ricardo Baeza-Yates, Barbara Poblete. Dynamics of the Chilean Web structure. *Computer Networks* 50:1464-1473, 2006.

[58] Ricardo Baeza-Yates, Carlos Castillo and Vicente López. Characteristics of the Web of Spain. *Cybermetrics* 9 (1), 2005. URL: www.cindoc.csic.es/cybermetrics/articles/v9i1p3.html.

[59] Lee Meisel, Beatriz Fonseca, Susana Gonzalez, Ricardo Baeza-Yates, Verónica Cambiazo, Reinaldo Campos, Mauricio Gonzalez, Ariel Orellana, Julio Retamales, and Herman Silva. A Rapid and Efficient Method for Purifying High Quality Total RNA from Peaches (*Prunus persica*) for Functional Genomics Analyses. *Biological Research* 38:83-88, 2005. More than **260** citations.

[60] Alexander Jaimes, Javier Ruiz-del-Solar, Rodrigo Verschae, Ricardo Baeza-Yates, Carlos Castillo, Dinko Yaksic, and Emilio Davis. On the Image Content of a Web Segment: Chile as a Case Study. *Journal of Web Engineering* 3 (2), 153–168, 2004.

[61] Ricardo Baeza-Yates. Information Retrieval in the Web: beyond current search engines, *International Journal on Approximated Reasoning* 34 (2-3), 97–104, 2003. More than **100** citations.

[62] Ricardo Baeza-Yates, Joaquim Gabarró, and Xavier Messeguer. Fringe Analysis of Synchronized Parallel Insertion Algorithms in 2-3 Trees. *Theoretical Computer Science A* 299: 231–271, 2003.

[63] G. Navarro, R. Baeza-Yates, and J.M.A. Arcoverde. *Matchsimile*: A Flexible Approximate Matching Tool for Searching Proper Names. *Journal of the American Society of Information Systems and Technology* 54(1): 3-15, 2003.

[64] Jayme Szwarcfiter, Gonzalo Navarro, Ricardo Baeza-Yates, Joísa de S. Oliveira, Walter Cunto, and Nivio Ziviani. Optimal Binary Search Trees with Costs Depending on the Access Paths. *Theoretical Computer Science (TCS) A* 290(3):1799–1814, 2003.

[65] R. Baeza-Yates and H. Soza-Pollman, Optimal Bounded Disorder, *Information Processing Letters* 83(3), 151-157, 2002.

[66] R. Baeza-Yates and G. Navarro. XQL and Proximal Nodes, *Journal of the American Society of Information Systems and Technology*, special issue on XML and Information Retrieval, 53(6): 504–514, 2002.

[67] Ricardo Baeza-Yates and Gonzalo Navarro. New and Faster Filters for Multiple Approximate String Matching. *Random Structures and Algorithms* 20(1): 23-49, 2002.

[68] Gonzalo Navarro, Ricardo Baeza-Yates, Erkki Sutinen and Jorma Tarhio. Indexing Methods for Approximate String Matching. *IEEE Data Engineering Bulletin*, special issue on "Managing Text Natively and in DBMSs", 24(4): 19–27, 2001. More than **330** citations.

[69] Edgar Chávez, Gonzalo Navarro, Ricardo Baeza-Yates and José Luis Marroquín. Searching in Metric Spaces. *ACM Computing Surveys* 33(3):273–321, 2001. More than **1,900** citations and 7,200 downloads.

[70] Gonzalo Navarro and Ricardo Baeza-Yates. Improving an Algorithm for Approximate String Matching. *Algorithmica* 30(4):473-502, 2001.

[71] R. Baeza-Yates. Let's Design Everything Again: Thoughts on Computing and Its Teaching. *Upgrade* 2(4):1–9, 2001.

[72] Nivio Ziviani, Edleno de Moura, Gonzalo Navarro and Ricardo Baeza-Yates. Compression: A Key for Next-Generation Text Retrieval Systems. *IEEE Computer* 33(11):37-44 (cover feature), November 2000. More than **190** citations.

[73] R. Baeza-Yates and G. Navarro. New Models and Algorithms for Multidimensional Approximate Pattern Matching. *Journal of Discrete Algorithms* 1(1):21-49, 2000.

[74] G.Navarro and R. Baeza-Yates. A Hybrid Indexing Method for Approximate String Matching. Journal of Discrete Algorithms 1(1), 205-239, 2000. More than **180** citations.

[75] Gonzalo Navarro, Edleno Silva de Moura, Marden S. Neubert, Nivio Ziviani, Ricardo Baeza-Yates: Adding Compression to Block Addressing Inverted Indexes. *Information Retrieval* 3(1): 49-77, 2000. More than **160** citations.

[76] Edleno de Moura, Gonzalo Navarro, Nivio Ziviani and Ricardo Baeza-Yates. Fast and flexible word searching on compressed text. *ACM Transactions on Information Systems (TOIS)* 18(2): 113-139, 2000. More than **340** citations and **2,000** downloads.

[77] G. Navarro, E. Barbosa, R. Baeza-Yates, W. Cunto, and N. Ziviani, Binary Searching with Non-uniform Costs and Its Application to Text Retrieval. *Algorithmica* 27 (2): 145–169, 2000.

[78] Omar Alonso and Ricardo Baeza-Yates. A Software Architecture for Search and Results Visualization on Intranets, Upgrade 1(1): 2000.

[79] R. Baeza-Yates and G. Navarro. Block-Addressing Indices for Approximate Text Retrieval. *J. of the American Society for Information Science (JASIS)* 51(1):69–82, Jan 2000. More than **140** citations.

[80] G. Navarro and R. Baeza-Yates. Very fast and simple approximate string matching. *Information Processing Letters* 72: 65-70. 1999.

[81] R. Baeza-Yates, R. Gavaldà, G. Navarro, and R. Scheihing, Bounding the Expected Length of Longest Common Subsequences and Forests. *Theory of Computing Systems*, 32 (4):453–466. 1999.

[82] R. Baeza-Yates and G. Navarro. Faster approximate string matching. *Algorithmica*, 23 (2):127–158, 1999. More than **250** citations.

[83] Gonzalo Navarro and Ricardo Baeza-Yates. A Practical q-Gram Index for Text Retrieval Allowing Errors. In CLEI Electronic Journal 1(2), 1998.

[84] R. Baeza-Yates and H. Soza-Pollman. Analisys of linear hashing revisited. *Nordic Journal of Computing*, 5:70–85, 1998.

[85] G. Navarro and R. Baeza-Yates. Proximal Nodes: a model to query document databases by content and structure. *ACM TOIS*, 15(4):401–435, Oct 1997. More than **240** citations.

[86] R. Baeza-Yates and G. Navarro. Integrating content and structure in text retrieval. *ACM SIGMOD Record*, 25(1):67–79, March 1996. More than **180** citations.

[87] R. Baeza-Yates and G.H. Gonnet. Fast text searching for regular expressions or automaton searching on tries. *Journal of the ACM*, 43(6):915–936, Nov 1996. More than **200** citations and **2,500** downloads.

[88] R. Baeza-Yates. Bounded disorder: The effect of the index. *Theoretical Computer Science*, 168:21–38, 1996.

[89] R. Baeza-Yates, E. Barbosa, and N. Ziviani. Hierarchies of indices for text searching. *Information Systems*, 21(6):497–514, 1996. **COMPAQ Award to the best Brazilian CS paper that year.**

[90] R. Baeza-Yates and C.H. Perleberg. Fast and practical approximate pattern matching. *Information Processing Letters*, 59:21–27, 1996. More than **180** citations.

[91] R. Baeza-Yates and L. Fuentes. A framework to animate string algorithms. *Information Processing Letters*, 59(5):241–244, Sept. 1996.

[92] R. Baeza-Yates. An extended model for full-text databases. *Journal of Brazilian CS Society*, 3(2):57–64, April 1996.

[93] R. Baeza-Yates. Teaching algorithms. *ACM SIGACT News*, 26(4):51–59, Dec 1995.

[94] R. Baeza-Yates, D. Fuller, J. Pino, and S. Goodman. Computing in Chile: The jaguar of the pacific rim? *Communications of the ACM*, 38:23–28, 1995.

[95] R. Baeza-Yates and R. Schott. Parallel searching in the plane. *Computational Geometry: Theory and Applications*, 5:143–154, 1995.

[96] R. Baeza-Yates and P.V. Poblete. Higher order analysis of 2-3 trees. *International Journal on Foundations of Computer Science*, 6(1):1–10, 1995.

[97] R. Baeza-Yates, D. Fuller, and J. Pino. Information technology landmarks in Chile: A survey. *Information Technology for Development*, 6(1):25–31, March 1995.

[98] R. Baeza-Yates. Fringe analysis revisited. *ACM Computing Surveys*, 27:109–119, March 1995.

[99] R. Baeza-Yates, C. Choffrut, and G.H. Gonnet. On Boyer-Moore automata. *Algorithmica*, 12:268–292, 1994.

[100] R. Baeza-Yates and G.H. Gonnet. Fast string matching with mismatches. *Information and Computation*, 108(2):187–199, 1994.

[101] R. Baeza-Yates, J. Culberson, and G. Rawlins. Searching in the Plane. *Information and Computation*, 106(2):234–252, Oct 1993. More than **580** citations.

[102] P.S. Amerins, R. Baeza-Yates, and D. Wood. On efficient entreeings. *Acta Informatica*, 30(3):203–213, 1993.

[103] R. Baeza-Yates and M. Régnier. Fast two dimensional pattern matching. *Information Processing Letters*, 45:51–57, 1993.

[104] R. Baeza-Yates and W. Cunto. Unbalanced multiway trees improved by partial expansions. *Acta Informatica*, 29(5):443–460, 1992.

[105] R. Baeza-Yates and G.H. Gonnet. A new approach to text searching. *Communications of the ACM*, 35:74–82, Oct 1992. More than **1000** citations and **4,200** downloads.

[106] R. Baeza-Yates, G.H. Gonnet, and N. Ziviani. Improved bounds for the expected behaviour of AVL trees. *BIT*, 32(2):297–315, 1992.

[107] R. Baeza-Yates and M. Régnier. Average running time of the Boyer-Moore-Horspool algorithm. *Theoretical Computer Science*, 92(1):19–31, January 1992.

[108] R. Baeza-Yates, R. Casas, J. Díaz, and C. Martínez. On the size of the intersection of binary trees. *SIAM J. on Computing*, 21(1):24–32, 1992.

[109] R. Baeza-Yates. Height balance distribution of search trees. *Information Processing Letters*, 39(6):317–324, 1991.

[110] U. Manber and R. Baeza-Yates. An algorithm for string matching with a sequence of don't cares. *Information Processing Letters*, 37:133–136, February 1991. More than **170** citations.

[111] R. Baeza-Yates. Searching Subsequences. *Theoretical Computer Science*, 78:363–376, 1991. More than **130** citations.

[112] G.H. Gonnet and R. Baeza-Yates. An analysis of the Karp-Rabin string matching algorithm. *Information Processing Letters*, 34:271–274, 1990.

[113] R. Baeza-Yates. A storage allocation algorithm suitable for file structures. *Information Systems*, 15(5):515–521, 1990.

[114] R. Baeza-Yates. Algorithms for string matching: A survey. *ACM SIGIR Forum*, 23(3-4):34–58, 1989. More than **110** citations and **2,200** downloads.

[115] R. Baeza-Yates and P-Å. Larson. Performance of B^+-trees with partial expansions. *IEEE Trans. on Knowledge and Data Engineering*, 1:248–257, June 1989.

[116] R. Baeza-Yates. Improved string searching. *Software-Practice and Experience*, 19(3):257–271, 1989. More than **120** citations.

[117] R. Baeza-Yates. A trivial algorithm whose analysis isn't: A continuation. *BIT*, 29:88–113, 1989.

[118] R. Baeza-Yates. Modeling splits in file structures. *Acta Informatica*, 26(4):349–362, 1989.

[119] R. Baeza-Yates. Expected behaviour of B^+-trees under random insertions. *Acta Informatica*, 26(5):439–472, 1989.

[120] R. Baeza-Yates. Some average measures in m-ary search trees. *Inf. Proc. Letters*, 25:375–381, July 1987.

12.6 International Conferences

[1] Marios Constantinides, Mohammad Tahaei, Daniele Quercia, Simone Stumpf, Michael Madaio, Sean Kennedy, Lauren Wilcox, Jessica Vitak, Henriette Cramer, Edyta Paulina Bogucka, Ricardo Baeza-Yates, Ewa Luger, Jess Holbrook, Michael J. Muller, Ilana Golbin Blumenfeld, Giada Pistilli. Implications of Regulations on the Use of AI and Generative AI for Human-Centered Responsible Artificial Intelligence. In *CHI Extended Abstracts* 2024: 582:1-582:4, Honolulu, USA, May 2024.

[2] Aida Sharif Rohani, Ricardo Baeza-Yates. Measuring Bias. In *IEEE Big Data 2023*, Sorrento, Italy, Dec 2023.

[3] Sofia Yfantidou, Pavlos Sermpezis, Athena Vakali, Ricardo Baeza-Yates. Uncovering Bias in Personal Informatics. In *ACM Interact. Mob. Wearable Ubiquitous Technol.* 7(3): 139:1-139:30, Cancún, Mexico, Oct 2023.

[4] Mykola Trokhymovych, Muniza Aslam, Ai-Jou Chou, Ricardo Baeza-Yates, Diego Sáez-Trumper. Fair Multilingual Vandalism Detection System for Wikipedia. In *KDD 2023*: 4981-4990, Long Beach, USA, Aug 2023.

[5] Mohammad Tahaei, Marios Constantinides, Daniele Quercia, Sean Kennedy, Michael J. Muller, Simone Stumpf, Q. Vera Liao, Ricardo Baeza-Yates, Lora Aroyo, Jess Holbrook, Ewa Luger, Michael Madaio, Ilana Golbin Blumenfeld, Maria De-Arteaga, Jessica Vitak, Alexandra Olteanu. Human-Centered Responsible Artificial Intelligence: Current & Future Trends. In *CHI Extended Abstracts* 2023: 515:1-515:4, Hamburg, Germany, Apr 2023.

[6] Bruno Scarone, Ricardo Baeza-Yates, Erik Bernhardson. Understanding Search Behavior Bias in Wikipedia. In *BIAS 2023*: 134-146, Dublin, Ireland, Apr 2023.

[7] Ricardo Baeza-Yates, Giovanni Delnevo. Exploration Trade-offs in Web Recommender Systems. In *IEEE Big Data 2022*, Osaka, Japan, Dec 2022.

[8] Ricardo Baeza-Yates, Pablo Villoslada. Human vs. Artificial Intelligence. In *IEEE CogMI 2022*: 40-48, Atlanta, USA, Dec 2023.

[9] Ricardo Baeza-Yates, Marina Estévez-Almenzar. The Relevance of Non-Human Errors in Machine Learning. In *EBem@IJCAI 2022*, CEUR Workshop Proceedings 3169, Vienna, Jul 2022.

[10] Eduardo Graells-Garrido, Ricardo Baeza-Yates. Bots don't Vote, but They Surely Bother! A Study of Anomalous Accounts in a National Referendum. In *ACM Web Science 2020*, Barcelona, Spain, Jun 2022.

[11] Ioanna Tsalouchidou, Francesco Bonchi, Ricardo Baeza-Yates. Adaptive Community Search in Dynamic Networks. In *IEEE BigData 2020*, 987-995, 2020.

[12] Soner Altin, Ricardo Baeza-Yates, B.Barla Cambazoglu. A Comparison of Pre-Indexing Document Pruning Strategies. In *SPIRE 2020*, Orlando, FL, USA, Oct 2020.

[13] Eduardo Graells-Garrido, Ricardo Baeza-Yates, Mounia Lalmas. Every Colour You Are: Stance Prediction and Turnaround in Controversial Issues, In *ACM Web Science 2020*, Southampton, UK, Jun 2020.

[14] Diana Ramírez-Cifuentes, Christine Largeron, Julien Tissier, Ana Freire, and Ricardo Baeza-Yates. Enhanced Word Embeddings for Anorexia Nervosa Detection on Social Media. In *18th International Symposium on Intelligent Data Analysis (IDA 2020)*, 404–417, LNCS 12080, Springer, Konstanz, Germany, Apr 2020.

[15] Maria Rauschenberger, Ricardo Baeza-Yates, and Luz Rello. Screening risk of dyslexia through a web-game using language-independent content and machine learning. In *Proceedings of the 17th International Web for All Conference*, 1–12, ACM Press, Taipei, Taiwan, Apr 2020.

[16] Eduardo Graells-Garrido, Ricardo Baeza-Yates, Mounia Lalmas. Representativeness of Abortion Legislation Debate on Twitter: A Case Study in Argentina and Chile. In *WWW (Companion Volume)*, 765-774, Taipei, Taiwan, Apr 2020.

[17] Lorena Recalde, Ricardo Baeza-Yates. What kind of content are you prone to tweet? Multi-topic Preference Model for Tweeters. In *International Workshop on Algorithmic Bias in Search and Recommendation* 110–126, Lisbon, Portugal, Apr 2020.

[18] Ricardo Baeza-Yates, Alfredo Cuzzocrea, Domenico Crea, Giovanni Lo Bianco. An Effective and Efficient Algorithm for Ranking Web Documents via Genetic Programming, In *ACM SAC 2019*, Limassol, Cyprus, 1065-1072, Apr 2019.

[19] Maria Rauschenberger, Ricardo Baeza-Yates, Luz Rello, Jeff Bingham. Towards Language Independent Detection of Dyslexia with a Web-based Game. W4A 2018, Lyon, France, Apr 2018.

[20] Ricardo Baeza-Yates, Zeinab Liaghat. Quality-efficiency trade-offs in machine learning for text processing. In *IEEE BigData 2017*, Boston, USA, Dec 2017.

[21] Meike Zehlike, Francesco Bonchi, Carlos Castillo, Sara Hajian, Mohamed Megahed, Ricardo Baeza-Yates. FA*IR: A Fair Top-k Ranking Algorithm. In *ACM CIKM 2017*, Singapore, Nov 2017. More than **520** citations.

[22] Ricardo Baeza-Yates, Luz Rello. The Impact of Misspellings on Reading Comprehension for People with Dyslexia. In *International Dyslexia Association Annual Conference*, Atlanta, Nov 2017.

[23] Lorena Recalde, David Nettleton, Ricardo Baeza-Yates, Ludovico Boratto. Detection of Trending Topic Communities: Bridging Content Creators and Distributors. In *Hypertext 2017*, pp. 205–213, Prague, Check Republic, Jul 2017.

[24] Liangda Li, Hongbo Deng, Anlei Dong, Yi Chang, Ricardo Baeza-Yates, Hongyuan Zha. Exploring Query Auto-Completion and Click Logs for Contextual-Aware Web Search and Query Suggestion. In *WWW 2017*, pp. 539–548, Perth, Australia, Apr 2017.

[25] Ioanna Tsalouchidou, Gianmarco De Francisci Morales, Francesco Bonchi, Ricardo Baeza-Yates. Scalable Dynamic Graph Summarization. In *IEEE Big Data 2016*, pp. 1032–1039, Washington D.C., USA, Dec 2016.

[26] Luca Aiello, Ioannis Arapakis, Ricardo Baeza-Yates, Xiao Bai, Nicola Barbieri, Amin Mantrach, Fabrizio Silvestri. The Role of Relevance in Sponsored Search. In *CIKM 2016*, pp. 185–194, Indianapolis, USA, November 2016.

[27] Ricardo Baeza-Yates, Guoquiang Wang. Lexical Matching of Queries and Ads Bid Terms in Sponsored Search. In *SPIRE 2016*, Lecture Notes in Computer Science, vol. 9954, Springer, pp. 231–239, Beppu, Japan, October 2016.

[28] Mihajlo Grbovic, Djuric Nemanja, Vladan Radosavljevic, Fabrizio Silvestri, Ricardo Baeza-Yates, Andrew Feng, Erik Ordentlich, Lee Yang, Gawin Owens. Scalable Semantic Matching of Search Queries to Ads in Sponsored Search Advertising. In *SIGIR 2016*, pp. 375–384, Pisa, Italy, July 2016.

[29] Ricardo Baeza-Yates, Luz Rello, Julia Dembowski. CASSAurus: A Resource of Simpler Spanish Synonyms. In *LREC 2016*, Portoroz, Slovenia, May 2016.

[30] Aston Zhang, Amit Goyal, Ricardo Baeza-Yates, Yi Chang, Jiawei Han, Carl A. Gunter, Hongbo Deng. Towards Mobile Query Auto-Completion: A Mobile Application-Aware Approach. In *WWW 2016*, Montreal, Canada, pp. 579–590, Apr 2016.

[31] Eduardo Graells-Garrido, Mounia Lalmas, Ricardo Baeza-Yates. Encouraging Diversity and Representation Awareness in Geographically Centralized Content. In *ACM Intelligent Users Interfaces (IUI)*, pp. 7-18, Sonoma, CA, USA, March 2016.

[32] Eduardo Graells-Garrido, Mounia Lalmas, Ricardo Baeza-Yates. Data Portraits and Intermediary Topics: Encouraging Exploration of Politically Diverse Profiles. In *ACM Intelligent Users Interfaces (IUI)*, pp. 228-240, Sonoma, CA, USA, March 2016.

[33] Ricardo Baeza-Yates, Diego Sáez-Trumper. Wisdom of the Crowd or Wisdom of a Few?: An Analysis of Users' Content Generation. In *ACM Hypertext & Social Media*, pp. 69-74, Guzelyurt, TRNC, Cyprus, Sep 2015.

[34] Ricardo Baeza-Yates, Martí Mayo-Casademont, Luz Rello. Feasibility of Word Difficulty Prediction. In *SPIRE 2015*, LNCS Springer, London, UK, August 2015.

[35] Liangda Li, Hongbo Deng, Anlei Dong, Yi Chang, Hongyuan Zha, Ricardo Baeza-Yates. Analyzing User's Sequential Behavior in Query Auto-Completion via Markov Processes. In *ACM SIGIR 2015*, Santiago, Chile, August 2015.

[36] Ricardo Baeza-Yates, Luz Rello, Julia Dembowski. CASSA: A Context-Aware Synonym Simplification Algorithm. In *NAACL-HLT 2015*, Denver, USA, June 2015.

[37] Ricardo Baeza-Yates, Paolo Boldi, Flavio Chierichetti. Essential Pages are Easy to Find. In *WWW 2015*, Florence, May 2015. **Finalist for the best paper award**.

[38] Ricardo Baeza-Yates, Di Jiang, Fabrizio Silvestri, Beverly Harrison. Predicting the Next App that You Are Going to Use. In *WSDM 2015*, Shanghai, Feb 2015. **Best paper at Yahoo Techpulse 2014**

[39] Ruth Garcia-Gavilanes, Andreas Kaltenbrunner, Diego Sáez-Trumper, Ricardo Baeza-Yates, Pablo Aragón, David Laniado. Who Are My Audiences? A Study of the Evolution of Target Audiences in Microblogs. In *SocInfo 2014*, 561–772, Barcelona, Nov 2014, 561-572.

[40] Diego Saez-Trumper, Yabing Liu, Ricardo Baeza-Yates, Balachander Krishnamurthy, Alan Mislove. Beyond CPM and CPC: Determining the value of users on OSNs. In *COSN'14: Proceedings of the second ACM Conference on Online Social Networks*. ACM, Dublin, Ireland, Oct 2014.

[41] Luz Rello, Ricardo Baeza-Yates, Joaquim Llisterri. DysList: An Annotated Resource of Dyslexic Errors. In *LREC 2014*, 1289–1296, Reykjavik, Iceland,May 2014.

[42] Luz Rello, Ricardo Baeza-Yates. Evaluation of Dyswebxia, A Reading App Designed for People with Dyslexia. W4A 2014, Seoul, South Korea, Apr 2014. **Best paper runner up.**

[43] Cigdem Aslay, Nicola Barbieri, Francesco Bonchi, Ricardo Baeza-Yates. Online Topic-Aware Influence Maximization Queries. In *EDBT 2014*, Athens, Greece, 295–306, Mar 2014.

[44] Guillem Frances, Xiao Bai, B. Barla Cambazoglu, Ricardo Baeza-Yates. Improving the Efficiency of Multi-site Web Search Engines. In *WSDM 2014*, New York, USA, 3–12, Feb 2014.

[45] Janette Lehmann, Mounia Lalmas, Georges Dupret, Ricardo Baeza-Yates. Online Multitasking - What Web Analytics think we do and what we really do. In *CIKM 2013*, Burlingame, Oct 2013.

[46] Elad Yom-Tov, Mounia Lalmas, Ricardo Baeza-Yates, Georges Dupret, Janette Lehmann, Pinar Donmez. Measuring Inter-Site Engagement. In *IEEE International Conference on Big Data (BigData 2013)*, Santa Clara, USA, Oct 2013.

[47] Luz Rello, Ricardo Baeza-Yates. Good fonts for dyslexia. In *ACM ASSETS 2013*, Bellevue, USA, Oct 2013. More than **4,400** downloads.

[48] Hossein Vahabi, Margareta Ackerman, David Loker, Ricardo Baeza-Yates, Alejandro López-Ortiz. Orthogonal query recommendations. In *ACM RecSys 2013*, Hong Kong, China, Oct 2013, 33–40.

[49] Luz Rello, Ricardo Baeza-Yates, Laura Dempere-Marco, Horacio Saggion. Frequent Words Improve Readability and Short Words Improve Understandability for People with Dyslexia. In *INTERACT* 2014 (4), Cape Town, South Africa, 2013, 203–219.

[50] Luz Rello, Susana Bautista, Ricardo Baeza-Yates, Pablo Gervás, Raquel Hervás, Horacio Saggion. One Half or 50%? An Eye-Tracking Study of Number Representation Readability. In *INTERACT* 2014 (4), Cape Town, South Africa, 2013, 229–245.

[51] Ricardo Baeza-Yates. Big Data or Right Data?. In *Proc. of the 7th Alberto Mendelzon International Workshop on Foundations of Data Management (AMW 2013)*, Loreto Bravo, Maurizio Lenzerini (Eds.), Puebla/Cholula, Mexico, May 21-23, CEUR Workshop Proceedings, vol. 1087, 2013.

[52] Luz Rello, Ricardo Baeza-Yates, Stefan Bott, Horacio Saggion. Simplify or help? Text simplification strategies for people with dyslexia. In *W4A 2013*, Rio de Janeiro, Brazil, May 2013. **Best paper award** and more than **480** citations.

[53] Luz Rello, Ricardo Baeza-Yates, Horacio Saggion. The Impact of Lexical Simplification by Verbal Paraphrases for People with and without Dyslexia. In *CICLing*, Samos, Greece, Mar 2013, 501–512.

[54] Diego Saez-Trumper, Giovanni Comarela, Virgilio Almeida, Ricardo Baeza-Yates, Fabricio Benevenuto. Finding Trendsetters in Information Networks. In *ACM KDD 2012*, Beijing, China, Aug 2012.

[55] Esteban Feuerstein, Verónica Gil-Costa, Mauricio Marín, Gabriel Tolosa, Ricardo Baeza-Yates. 3D Inverted Index with Cache Sharing for Web Search Engines In *EUROPAR 2012*, C. Klakamanis *et al* (Eds.), Springer LNCS 7484, Rhodes, Greece, Aug 2012, 272–284.

[56] Luz Rello, Gaurang Kanvinde, Ricardo Baeza-Yates. A Mobile Application for Displaying More Accessible eBooks to Dyslexics. In *Proceedings of DSAI 2012*. Douro Region, Portugal, Jul 2012.

[57] Luz Rello, Ricardo Baeza-Yates. Lexical Quality as a Measure for Textual Web Accessibility. In *ICCHP 2012*, Part I, K. Miesenberger at al. (Eds.) Linz, Austria, Springer LNCS 7382, pp. 404–408, Linz, Austria, Jul 2012.

[58] Luz Rello, Ricardo Baeza-Yates, Ruslan Mitkov. Elliphant: Improved Automatic Detection of Zero Subjects and Impersonal Constructions in Spanish. In *EACL 2012*, Avignon, France, Apr 2012, 706–715.

[59] Luz Rello, Gaurang Kanvinde, Ricardo Baeza-Yates. Layout Guidelines for Web Text and a Web Service to Improve Accessibility for Dyslexics. In *W4A 2012*, Lyon, France, Apr 2012.

[60] Ricardo Baeza-Yates, Simon Jonassen. Modeling Static Caching in Web Search Engines. In *ECIR 2012*, Barcelona, Spain, Springer LNCS 7224, Apr 2012, 436–446.

[61] Cristina González-Caro, Ricardo Baeza-Yates. A Multi-faceted Approach to Query Intent Classification. In *SPIRE 2011*, Pisa, Italy, Oct 2011, Springer LNCS 7024, 368–379.

[62] Vinay Jethava, Liliana Calderon-Benavides, Chiranjib Bhattacharyya, Devdatt Dubhashi, Ricardo Baeza-Yates. Scalable multi-dimensional user intent identification using tree structured distributions. In *SIGIR 2011*, Beijing, China, Jul 2011.

[63] Omar Alonso, Ricardo Baeza-Yates. Design and Implementation of Relevance Assessments using Crowdsourcing. In *ECIR 2011*, Dublin, Ireland, Springer LNCS 6611, Apr 2011, 153–164. More than **200** citations.

[64] Shuai Ding, Josh Attenberg, Ricardo Baeza-Yates, Torsten Suel. Batch Query Processing for Web Search Engines. In *WSDM 2011*, ACM Press, Hong Kong, Feb 2011, 137–146.

[65] B. Barla Cambazoglu, Hugo Zaragoza, Ricardo Baeza-Yates. Web Search Solved? All Result Rankings the Same? In *ACM CIKM 2010*, Toronto, Canada, Nov 2010, 529–538.

[66] Alexandre P. Francisco, Ricardo Baeza-Yates, Arlindo L. Oliveira. Mining Large Query Induced Graphs towards a Hierarchical Query Folksonomy. SPIRE 2010, Springer LNCS 6393, Los Cabos, Oct 2010, 237–242.

[67] Omar Alonso, Michael Gertz, Ricardo Baeza-Yates. Temporal Analysis of Document Collections: Framework and Applications. SPIRE 2010, Springer LNCS 6393, Los Cabos, Oct 2010, 290–296.

[68] Ilaria Bordino, Debora Donato, Ricardo Baeza-Yates. Coniunge et Impera: Multiple-graph mining for Query-log analysis. In *Proceedings of PKDD'2010*, Barcelona, Spain, Sept 2010, 168–183.

[69] B. Barla Cambazoglu, Emre Varol, Enver Kayaaslan, Cevdet Aykanat, Ricardo Baeza-Yates. Query Forwarding in Geographically Distributed Search Engines. In *Proceedings of SIGIR'2010*, Geneva, Switzerland, July 2010, 90–97.

[70] Liliana Calderón, Cristina González, Ricardo Baeza-Yates, Towards a Deeper Understanding of the User's Query Intent. In *SIGIR 2010 Workshop on Query Representation and Understanding*, Geneva, Switzerland, July 2010.

[71] Sumio Fujita, Tatsuya Uchiyama, Georges Dupret, Ricardo Baeza-Yates. Search Facet Creation from Click Logs. In *SIGIR 2010 Workshop on Query Representation and Understanding*, Geneva, Switzerland, July 2010.

[72] Ricardo Baeza-Yates, Aristides Gionis, Flavio Junqueira, Vassilis Plachouras, Luca Telloli. On the Feasibility of Multi-Site Web Search Engines. In *ACM CIKM 2009*, Hong Kong, China, November 2009, 425-434. **Best paper award**.

[73] Omar Alonso, Michael Gertz, Ricardo Baeza-Yates. Clustering and Exploring Search Results using Timeline Constructions. In *ACM CIKM 2009*, Hong Kong, China, November 2009. More than **170** citations.

[74] Ricardo Baeza-Yates, Christian Middleton, Carlos Castillo. The Geographical Life of Search. In *ACM/IEEE/WIC Web Intelligence*, Milano, Italy, September 2009.

[75] Esteban Feuerstein, Mauricio Marín, Michel Mizrahi, Verónica Gil Costa, Ricardo Baeza-Yates. Two-Dimensional Distributed Inverted Files. In *SPIRE 2009*, Saariselka, Finland, August 2009, 206-213.

[76] Ricardo Baeza-Yates, Vanessa Murdock, Claudia Hauff. Efficiency Trade-offs in Two-tier Web Search Systems. In *SIGIR 2009*, Boston, USA, July 2009, 163-170.

[77] Berkant Barla Cambazoglu, Vassilis Plachouras, Ricardo Baeza-Yates. Quantifying Performance and Quality Gains in Distributed Web Search Engines. In *SIGIR 2009*, Boston, USA, July 2009, 411-418.

[78] Victor Pascual-Cid, Ricardo Baeza-Yates, Juan Carlos Dürsteler, Sergi Mínguez, Christian Middleton. New Techniques for Visualising Web Navigational Data. Conference on Information Visualization, Barcelona, July 2009, 621–626.

[79] Alvaro Pereira, Ricardo Baeza-Yates, Nivio Ziviani, Jesús Bisbal. A Model for Fast Web Mining Prototyping. In *ACM WSDM 2009*, Barcelona, Feb 2009. More than **1,100** downloads.

[80] Alexandre Francisco, Ricardo Baeza-Yates, Arlindo Oliveira. Clique Analysis of Query Log Graphs. In *SPIRE 2008*, Melbourne, Australia, 188–199, Nov 2008.

[81] Claudia Hauff, Vanessa Murdock, Ricardo Baeza-Yates. Improved Query Difficulty Prediction for the Web. In *CIKM 2008*, Napa Valley, USA, Oct 2008.

[82] Marcelo Mendoza, Ricardo Baeza-Yates. A Web Search Analysis considering the Intention behind Queries. Latin American Web Conference, Vila Velha, Brazil, Oct 2008.

[83] Gleb Skobeltsyn, Flavio Junqueira, Vassilis Plachouras, Ricardo Baeza-Yates. ResIn: A Combination of Result Caching and Index Pruning for High-performance Web Search Engines. In *SIGIR 2008*, Singapore, Jul 2008.

[84] Ricardo Baeza-Yates, Álvaro R. Pereira Jr., Nivio Ziviani. Genealogical trees on the Web: a search engine user perspective. In *WWW 2008*, Beijing, China, Apr 2008, 367-376.

[85] Barbara Poblete, Ricardo Baeza-Yates. Query-sets: using implicit feedback and query patterns to organize Web documents. In *WWW 2008*, Beijing, China, Apr 2008, 41-50. More than **100** citations.

[86] Barbara Poblete, Myra Spiliopoulou, Ricardo Baeza-Yates. Website Privacy Preservation for Query Log Publishing. In *First ACM SIGKDD International Workshop on Privacy, Security, and Trust in KDD (PinKDD'07)*, F. Bonchi, E. Ferrari, B. Malin and Y. Saygin (Eds.), Springer LNCS 4890, San Jose, California, USA, 80–96, 2008. **Best paper award**.

[87] Ricardo Baeza-Yates, Flavio Junqueira, Vassilis Plachouras, Hans F. Witschel. Admission Policies for Caches of Search Engine Results, In *SPIRE 2007*, LNCS 4726, Springer, Santiago, Chile, Oct 2007, 74-85.

[88] Esteban Feuerstein, Pablo Heiber, Javier Martinez-Viademonte, Ricardo Baeza-Yates. New Stochastic Algorithms for Placing Ads in Sponsored Search. In *Fifth Latin American Web Conference (LA-WEB)*. IEEE CS Press. Santiago, Chile, Nov 2007, 22-31.

[89] Gabriel Tolosa, Fernando Bordignon, Ricardo Baeza-Yates, Carlos Castillo. Distinctive Features of the Argentinian Web. In *Fifth Latin American Web Conference (LA-WEB)*. IEEE CS Press. Santiago, Chile, Nov 2007, pp. 136–143.

[90] Ricardo Baeza-Yates, Alessandro Tiberi. Extracting Semantic Relations from Query Logs. In *ACM KDD 2007*, San Jose, California, USA, August 2007, 76–85. More than **410** citations and **3,300** downloads.

[91] Ricardo Baeza-Yates, Aristides Gionis, Flavio Junqueira, Vanessa Murdock, Vassilis Plachouras, Fabrizio Silvestri. The Impact of Caching on Search Engines. In *30th Annual International ACM SIGIR Conference*, Amsterdam, Netherlands, July 2007, 183–190. More than **290** citations.

[92] Diego Puppin, Fabrizio Silvestri, Raffaele Perego, Ricardo Baeza-Yates. Load-Balancing and Caching for Collection Selection Architectures, In *INFOSCALE 2007*, Suzhou, China, June 2007.

[93] Ricardo Baeza-Yates, Georges Dupret, Javier Velasco A Study of Mobile Search Queries in Japan. Workshop on Query Log Analysis: Social and Technological Challenges, WWW 2007, Banff, Canada, May 2007.

[94] Ricardo Baeza-Yates, Liliana Calderón-Benavides, Cristina González-Caro. The Intention Behind Web Queries. SPIRE 2006, LNCS Springer, Glasgow, Scotland, October 2006. More than **280** citations.

[95] Alvaro Pereira Jr., Ricardo Baeza-Yates, Nivio Ziviani. When and where Web duplicates occur. In *IV Latin American Web Congress*, IEEE CS Press, Puebla, México, October 2006, 127-134.

[96] David Nettleton, Liliana Calderón, Ricardo Baeza-Yates. Engine Query Sessions: A Clicked URLs Perspective. In *IV Latin American Web Congress*, IEEE CS Press, Puebla, México, October 2006, 209-219.

[97] Petr Kroha, Ricardo Baeza-Yates, B. Krellner. Text Mining of Business News for Forecasting. In *Proceedings of 17th International Conference DEXA'2006, Workshop on Theory and Applications of Knowledge Management TAKMA'2006*, pp. 171-175, IEEE Computer Society Press, Krakow, September 2006.

[98] Ricardo Baeza-Yates, Paolo Boldi, Carlos Castillo. Generalizing PageRank: Damping Functions for Link-Based Ranking Algorithms. In *Proceedings of ACM SIGIR 2006*. Seattle, Washington, USA, August 2006. More than **140** citations.

[99] Luca Becchetti, Carlos Castillo, Debora Donato, Stefano Leonardi, Ricardo Baeza-Yates. Link-Based Characterization and Detection of Web Spam. In *Workshop on Adversarial Information Retrieval on the Web (AIRWeb)*. Seattle, USA, August 2006. More than **230** citations.

[100] Ricardo Baeza-Yates, Álvaro Pereira Jr, Nivio Ziviani. The Evolution of Web Content and Search Engines. In *Proceedings of the Workshop on Web Mining and Web Usage Analysis* (WebKDD). Philadelphia, USA, August 2006. ACM Press, 58-67.

[101] Luca Becchetti, Carlos Castillo, Debora Donato, Stefano Leonardi, Ricardo Baeza-Yates. Using Rank Propagation and Probabilistic Counting for Link-Based Spam Detection. In *Proceedings of the Workshop on Web Mining and Web Usage Analysis* (WebKDD). Philadelphia, USA, August 2006. ACM Press, 140-149. More than **140** citations.

[102] David Nettleton, Liliana Calderón, Ricardo Baeza-Yates. Analysis of Web Search Engines Query Sessions. In *Proceedings of the Workshop on Web Mining and Web Usage Analysis* (WebKDD). Philadelphia, USA, August 2006. ACM Press, 68-77.

[103] Ricardo Baeza-Yates, Alejandro Salinger. Experimental Analysis of a Fast Intersection Algorithm for Sorted Sequences. In *SPIRE 2005*, LNCS 3772, M. Consens and G. Navarro, editors, Buenos Aires, Nov 2005, 13-24.

[104] R. Baeza-Yates, A. Pereira, N. Ziviani, WIM: A Web Information Mining Model for the Web, In *LA-WEB 2005*, IEEE CS Press, Oct 2005, 233-241.

[105] R. Baeza-Yates, C. Hurtado, M. Mendoza, G. Dupret, Modeling User Search Behavior, LA-WEB 2005, IEEE CS Press, 242-251, Oct 2005. More than **130** citations.

[106] J. Ruiz-del-Solar, V. Castañeda, R. Verschae, R. Baeza-Yates, F. Ortiz, Characterizing objectionable image content on specific Web segments: Chile as a case study. LA-WEB 2005, IEEE CS Press, 269-278, Oct 2005.

[107] Ricardo Baeza-Yates, Barbara Poblete, A Website Mining Model Centered on User Queries, European Web Mining Forum, B. Berendt *et al*, editors. October 2005, Oporto, Portugal, p. 3-15.

[108] Ricardo Baeza-Yates, Carlos Castillo. Link Analysis in National Web Domains. Workshop on Open Source Web Information Retrieval (OSWIR), pp. 15-18. Compiegne, France, September 2005.

[109] Carlos Castillo, Ricardo Baeza-Yates. WIRE: an Open-Source Web Information Retrieval Environment. Workshop on Open Source Web Information Retrieval (OSWIR), pp. 27-30. Compiegne, France, September 2005.

[110] Alvaro R. Pereira Jr., Ricardo Baeza-Yates. Applications of a Web Information Mining Model to Data Mining and Information Retrieval Tasks. 1st GREP, DEXA Workshops 2005, IEEE CS Press, 1031-1035.

[111] Ricardo Baeza-Yates, Alvaro R. Pereira Jr., Nivio Ziviani. WIM: An Information Mining Model for the Web. 1st IDDI, DEXA Workshops 2005, IEEE CS Press, 1155-1159.

[112] Petr Kroha, Ricardo Baeza-Yates. A Case Study: News Classification Based on Term Frequency. 6th TAKMA, DEXA Workshops 2005, IEEE CS Press, 428-432.

[113] R. Baeza-Yates, C. Castillo, M. Marín, A. Rodríguez. Crawling a Country: Better Strategies than Breadth-First for Page Ordering. In *WWW 2005, Industrial Track*, ACM Press, Chiba, Japan, May 2005. More than **190** citations.

[114] R. Baeza-Yates, C. Castillo, V. López. PageRank Increase under Different Collusion Topologies. Workshop on Adversarial Information Retrieval on the Web. Chiba, Japan, May 2005.

[115] C. Castillo, M. Marín, A. Rodríguez, R. Baeza-Yates. Scheduling Algorithms for Web Crawling. In *LA-WEB 2004*, IEEE CS Press, Riberao Preto, Brazil, October 2004.

[116] R. Baeza-Yates, J. Ruiz-del-Solar, R. Verschae, C. Hurtado, C. Castillo. Content-based Image Retrieval and Characterization on Specific Web Collections. In *Conference on Image and Video Retrieval*, LNCS, Springer, Dublin, Ireland, July 2004.

[117] R. Baeza-Yates, A Fast Set Intersection Algorithm for Sorted Sequences, In *15th Combinatorial Pattern Matching 2004*, LNCS, Springer, Istanbul, Turkey, July 2004. More than **140** citations.

[118] K. Wechsler, J. Baier, M. Nussbaum, R. Baeza-Yates. Semantic Search in the WWW supported by a Cognitive Model. In *Int. Conf. Web-Age Information Management*, LNCS 3129, Springer, Dalian, China, July 2004, p. 315-324.

[119] R. Baeza-Yates, E. Davis. Web Page Ranking using Link Attributes (poster), In *WWW13*, ACM Press, New York, USA, May 2004. More than **150** citations.

[120] R. Baeza-Yates, B. Poblete. Dynamics of the Chilean Web Structure. In *3rd Workshop on Web Dynamics* at WWW 2004, New York, USA, May 2004.

[121] R. Baeza-Yates, C. Hurtado, M. Mendoza. Ranking Boosting based in Query Clustering, In *2nd Atlantic Web Intelligence Conference*, LNCS 3034, Springer, Cancun, Mexico, May 2004, p. 164-175.

[122] Ricardo Baeza-Yates, Carlos A. Hurtado, Marcelo Mendoza. Query Recommendation Using Query Logs in Search Engines, Current Trends in Database Technology - EDBT 2004 Workshops, Workshop on Clustering Information over the Web, Heraklion, Crete, Greece, March 14-18, 2004, Revised Selected Papers. LNCS 3268, Springer, p. 588-596. More than **820** citations.

[123] Fidel Cacheda, Ricardo Baeza-Yates. An Optimistic Model for Searching Web Directories. In *Proceedings of the 26th European Conference on IR Research* (ECIR 2004). Lecture Notes in Computer Science 2997, Advances in Information Retrieval, Springer, pp 364-377, March 2004.

[124] H. Silva, R. Baeza-Yates, V. Cambiazo, R. Campos, M. González, L. Meisel, A. Orellana, J. Retamales. Chilean functional genomics in Prunus persica: An approach towards understanding post-harvest problems in peaches and nectarines. Plant & Animal Genomes XII Conference, San Diego, CA, USA, January 2004.

[125] L. Meisel, R. Baeza-Yates, M. Latorre, N. Loira, J. Maldonado, A. Morales, A. Tittarelli, P. Vizoso, H. Silva. University of Chile´s integrated plant gene expresion database. Plant & Animal Genome XII, San Diego, CA, USA, 2004.

[126] R. Baeza-Yates, B. Poblete. Evolution of the Chilean Web Structure Composition. In *LA-WEB 2003*, IEEE CS Press, Santiago, Chile, November 2003.

[127] A. Jaimes, J. Ruiz-del-Solar, R. Verschae, D. Yaksic, Ricardo Baeza-Yates, E. Davis, C. Castillo. On the Image Content of the Web in Chile. In *LA-WEB 2003*, IEEE CS Press, Santiago, Chile, November 2003.

[128] R. Baeza-Yates, F. Saint-Jean. A Three Level Search Engine Index based in Query Log Distribution. In *SPIRE 2003*, Springer LNCS, Manaus, Brazil, October 2003.

[129] Maldonado-Naude, F., Sánchez, J. A., Baeza-Yates, R. Using Hermes-F: Experiences with a framework for developing information retrieval applications. In *Fourth Mexican International Conference on Computer Science* (ENC 2003), Tlaxcala, Mexico; IEEE Computer Society Press, 101-108, Sep 2003.

[130] R. Baeza-Yates, C. Castillo. Balancing Volume, Quality and Freshness in Web Crawling. In *Hybrid Intelligent Systems 2002*, IOS Press, Santiago, December 2002.

[131] R. Baeza-Yates, F. Saint-Jean, C. Castillo. Web Dynamics, Age and Page Quality, In *Proceedings of SPIRE 2002*, LNCS, Springer, Lisbon, Portugal, September 2002. More than **150** citations.

[132] R. Baeza-Yates, C. Castillo, Relating Web Characteristics with Link Based Web Page Ranking, In *Proceedings of SPIRE 2001*, IEEE CS Press, Laguna San Rafael, Chile, pp. 21-32, November 2001.

[133] C. Badue, R. Baeza-Yates, B. Ribeiro-Neto, N. Ziviani. Distributed Query Processing Using Partitioned Inverted Files, In *Proceedings of SPIRE 2001*, IEEE CS Press, Laguna San Rafael, Chile, pp. 10-20, November 2001. More than **170** citations.

[134] Manuel Montes-y-Gómez, Alexander Gelbukh, Aurelio López López, Ricardo Baeza-Yates. Text mining with conceptual graphs. In *Proc. of the 2001 IEEE International Conference on Systems, Man and Cybernetics*, October 7-10, 2001, Tucson, Arizona, pp. 898-903.

[135] Manuel Montes-y-Gómez, Alexander Gelbukh, Aurelio López López, Ricardo Baeza-Yates. Flexible Comparison of Conceptual Graphs. In *Proc. DEXA-2001, 12th International Conference and Workshop on Database and Expert Systems Applications*, Munich, Germany, Lecture Notes in Computer Science, Springer, Sep 2001.

[136] Gonzalo Navarro, Ricardo Baeza-Yates, João Marcelo Arcoverde. Matchsimile: A Flexible Approximate Matching Tool for Personal Names Searching. In *Proceedings of SBBD'01*, Sao Paulo, Brazil, pages 228-242, October 2001.

[137] O. Alonso, R. Baeza-Yates, A Model and a Software Architecture for Search Results Visualization on the WWW In *Proceedings of the 7th Symposium on String Processing and Information Retrieval(SPIRE'2000)*, A Coruña, Spain, September 2000, IEEE CS Press, 8-16.

[138] R. Baeza-Yates, G. Valiente, An Image Similarity Measure based on Graph Matching, In *Proceedings of the 7th Symposium on String Processing and Information Retrieval (SPIRE'2000)*, A Coruña, Spain, September 2000, IEEE CS Press, 28-38.

[139] R. Baeza-Yates, W. Cunto. The ADT Proximity and Text Proximity Problems. In *6th Symposium on String Processing and Information Retrieval (SPIRE'99)*, Cancun, Mexico, September 1999. IEEE CS Press, 24-30.

[140] R. Baeza-Yates, G. Gonnet. A Fast Algorithm on Average for All-Against-All Sequence Matching. In *6th Symposium on String Processing and Information Retrieval (SPIRE'99)*, Cancun, Mexico, September 1999. IEEE CS Press, 16-23.

[141] E. Chávez, J.L. Marroquín, R. Baeza-Yates. Spaghettis: An Array based Algorithm for Similarity Queries in Metric Spaces. In *6th Symposium on String Processing and Information Retrieval (SPIRE'99)*, Cancun, Mexico, September 1999. IEEE CS Press, 38-46.

[142] J. Vegas, P. de la Fuente, R. Baeza-Yates. The EC Query Language Applied to Old Manuscripts. In *6th Symposium on String Processing and Information Retrieval (SPIRE'99)*, Cancun, Mexico, September 1999. IEEE CS Press, 206-223.

[143] Gonzalo Navarro, Ricardo Baeza-Yates. Fast Multi-Dimensional Approximate Pattern Matching. In *CPM'99*, LNCS 1645, M. Crochemore and M. Paterson, editors. Springer, Manchester, July 1999, 243-257.

[144] Gonzalo Navarro, Ricardo Baeza-Yates. A New Indexing Method for Approximate String Matching. In *CPM'99*, LNCS 1645, M. Crochemore and M. Paterson, editors. Springer, Manchester, July 1999, 163-185.

[145] O. Alonso, R. Baeza-Yates. A Model for Visualizing Large Answers in WWW, In *XVIII Int. Conf. of the Chilean CS Society*, Antofagasta, Chile, November 1998, IEEE CS Press, 2-7.

[146] T. Barros, C. Collao, K. Morikawa, N. Yamauchi, R. Arenas, J. M. Piquer, P. Pax, E. Vera, R. Baeza-Yates, M. Matsumoto, H. Tominaga. Long Distance MBONE Experiments between Japan and Chile, In *IEEE Workshop on Networked Appliances (IWNA'98)*, Kyoto, Japan, November 4-6, 1998.

[147] R. Baeza-Yates, J. Gabarro, X. Messeguer. Fringe Analysis of Synchronized Parallel Algorithms on 2–3 trees. In *RANDOM'98*, Barcelona, Spain, Sept. 1998, LNCS 1518, Springer Verlag, 131-144.

[148] R. Baeza-Yates, G. Navarro. Fast approximate string matching in a dictionary. In *5th South American Symposium on String Processing and Information Retrieval (SPIRE'98)*, Sta. Cruz de la Sierra, Bolivia, September 1998. IEEE CS Press, 14-22.

[149] E. Moura, G. Navarro, N. Ziviani, R. Baeza-Yates. Direct pattern matching on compressed text. In *5th South American Symposium on String Processing and Information Retrieval (SPIRE'98)*, Sta. Cruz de la Sierra, Bolivia, September 1998. IEEE CS Press, 90-95.

[150] R. Baeza-Yates, G. Navarro, J. Vegas, P. de la Fuente. A model and a visual query language for structured text. In *SPIRE'98*, Santa Cruz, Bolivia, Sept 1998. IEEE CS Press, 7-13.

[151] E. Moura, G. Navarro, N. Ziviani, R. Baeza-Yates. Fast searching on compressed text allowing errors. In *21th Annual International Conf. on Research and Development in Information Retrieval (SIGIR'98)*, Melbourne, Australia, 1998, 298-306.

[152] R. Baeza-Yates. Similarity in two dimensions. In *COOCON'98*, LNCS 1449, Taipei, Taiwan, August 1998. Springer Verlag, 319-328.

[153] R. Baeza-Yates, G. Navarro. Fast two-dimensional approximate string matching. In Cláudio Lucchesi and Arnaldo Moura, editors, *LATIN'98*, LNCS 1380, Springer, pages 341–351, Campinas, Brazil, April 1998.

[154] R. Baeza-Yates, J. A. Pino. A first step to formally evaluate collaborative work. In *ACM GROUP'97*, pages 56–60, Phoenix, AZ, USA, November 1997.

[155] R. Baeza-Yates, G. Navarro. Block-addressing indices for approximate text retrieval. In *Proc. CIKM'97*, pages 1–8, Las Vegas, USA, 1997.

[156] R. Baeza-Yates, G. Navarro. Multiple approximate string matching. In *Proc. WADS'97*, pages 174–184, 1997. Halifax, Nova Scotia, Canada. Aug 6-8.

[157] O. Alonso, R. Baeza-Yates, Visualizations of Answers in WWW Retrieval, GISS 1996 Internet Conference (GISSIC '96), Global Information and Software Society, Oct, 1996.

[158] R. Baeza-Yates, G. Navarro. A fast heuristic for approximate string matching. In N. Ziviani, R. Baeza-Yates, and K. Guimarães, editors, *Proc. of WSP'96*, pages 47–63, Recife, Brazil, August 1996.

[159] R. Baeza-Yates, V. Bruyere, O. Delgrange, R. Scheihing. About the size of Boyer Moore automata. In N. Ziviani, R. Baeza-Yates, and K. Guimarães, editors, *Proc. of WSP'96*, pages 31–46, Recife, Brazil, August 1996.

[160] R. Baeza-Yates, G. Navarro. A faster algorithm for approximate string matching. In Dan Hirchsberg and Gene Myers, editors, *Combinatorial Pattern Matching (CPM'96)*, LNCS 1075, pages 1–23, Irvine, CA, Jun 1996. More than **160** citations.

[161] R. Baeza-Yates. Visualization of large answers in text databases. In *Int. Workshop on Advanced User Interfaces (AVI'96)*, pages 101–107, Gubbio, Italy, May 1996. ACM Press. More than **210** citations.

[162] Eduardo Barbosa, Gonzalo Navarro, Ricardo Baeza-Yates, Chris Perleberg, Nivio Ziviani. Optimized binary search and text retrieval. In *European Symposium on Algorithms*, Corfu, Greece, September 1995.

[163] Gonzalo Navarro, Ricardo Baeza-Yates. A language for queries on structure and contents of textual databases. In *18th ACM Conference on Research and Development in Information Retrieval (SIGIR'95)*, pages 93–101, Seattle, WA, USA, July 1995. More than **120** citations.

[164] R. Baeza-Yates, E. Barbosa, N. Ziviani. Hierarchies of indices for text searching. In *RIAO'94 Intelligent Multimedia Information Retrieval Systems and Management*, pages 295–312, New York, October 1994.

[165] R. Baeza-Yates, M. Marín, P. Cordero. The analysis of an improved priority queue for discrete-event simulation of many moving objects. In *XIV International Conference of the Chilean Computer Science Society*, pages 29–42, Concepción, Chile, November 1994.

[166] R. Baeza-Yates. Analysis of bounded disorder. In B. Rovan I. Privara and P. Ruzicka, editors, *19th MFCS'94*, Springer LNCS 841, pages 233–244, Kosice, Slovakia, August 1994.

[167] R. Baeza-Yates, W. Cunto, U. Manber, S. Wu. Proximity matching using fixed queries trees. In M. Crochemore and D. Gusfield, editors, *5th Combinatorial Pattern Matching*, LNCS 807, pages 198–212, Asilomar, CA, June 1994. Springer-Verlag. More than **310** citations.

[168] R. Baeza-Yates, J. Sanchéz. Informatics and education in Chile: Present and future. In *Int. Conf. on Technology and Education ICTE'94*, volume 2, pages 1362–4, London, England, March 1994.

[169] R. Baeza-Yates, D. Fuller, J. Pino. A checklist for developing software export industries. In *Workshop of IFIP WG 9.4*, La Habana, Cuba, February 1994.

[170] R. Baeza-Yates, R. Schott. Parallel searching in the plane. In *RFIA'94 (9th Conference on Shape Recognition and Artificial Intelligence*, pages 557–566, Paris, France, Jan 1994. Preliminary version presented in XII Int. Conf. of the Chilean Computer Society, Santiago, Chile, Oct 1992, 269-279.

[171] R. Baeza-Yates, J.A. Pino. Visual and collaborative tools for software engineering education. In *IFIP Transactions A: Workshop of Software Engineering Education*, volume 40, pages 255–265. Elsevier, Hong Kong, September 1993.

[172] R. Baeza-Yates, J.M. Piquer, P. Poblete. The Chilean Internet connection or I never promised you a rose garden. In *INET'93*, pages GFC 1–9, San Francisco, August 1993.

[173] R. Baeza-Yates, D. Fuller, J. Pino. IT landmarks in less-developed countries: The Chilean case. In *21st CAIS/ACSI Annual Conference*, pages 2–8, Antigonish, NS, Canada, July 1993.

[174] R. Baeza-Yates, L. Jara, G. Quezada. VCC: Automatic animation of C programs. In *COMPUGRAPHICS'92*, pages 389–397, Lisboa, Portugal, December 1992.

[175] R. Baeza-Yates. Text retrieval: Theory and practice. In J. van Leeuwen, editor, *12th IFIP World Computer Congress, Volume I*, volume Algorithms, Software, Architecture, pages 465–476, Madrid, Spain, September 1992. Elsevier Science. More than **80** citations.

[176] R. Baeza-Yates, D. Fuller, J. Pino. Innovation as a critical success factor for the development of an information technology industry in Chile. In R.M. Aiken, editor, *12th IFIP World Computer Congress, Volume II*, volume Education and Society, pages 273–280, Madrid, Spain, September 1992. Elsevier Science.

[177] R. Baeza-Yates, C.H. Perleberg. Fast and practical approximate pattern matching. In A. Apostolico, M. Crochemore, Z. Galil, and U. Manber, editors, *Combinatorial Pattern Matching*, Springer LNCS 644, pages 185–192, Tucson, AZ, April/May 1992. More than **180** citations.

[178] R. Baeza-Yates, G.H. Gonnet, N. Ziviani. Expected behaviour analysis of AVL trees. In R. Karlsson and J. Gilbert, editors, *2nd Scandinavian Workshop in Algorithmic Theory, SWAT'90*, Springer LNCS 447, pages 143–159, Bergen, Norway, July 1990.

[179] R. Baeza-Yates, M. Régnier. Fast algorithms for two dimensional and multiple pattern matching. In R. Karlsson and J. Gilbert, editors, *2nd Scandinavian Workshop in Algorithmic Theory, SWAT'90*, Springer LNCS 447, pages 332–347, Bergen, Norway, July 1990.

[180] R. Baeza-Yates, G.H. Gonnet. Average case analysis of algorithms using matrix recurrences. In *2nd International Conference on Computing and Information, ICCI'90*, pages 47–51, Niagara Falls, Canada, May 1990.

[181] R. Baeza-Yates. An adaptive overflow technique for the B-tree. In F. Bancilhon, C. Thanos, and D. Tsichritzis, editors, *Extending Data Base Technology Conference (EDBT 90)*, Springer LNCS 416, pages 16–28, Venice, March 1990.

[182] R. Baeza-Yates, G. Gonnet, M. Régnier. Analysis of Boyer-Moore-type string searching algorithms. In *1st ACM-SIAM Symposium on Discrete Algorithms*, pages 328–343, San Francisco, January 1990. More than **1,300** downloads.

[183] R. Baeza-Yates, G.H. Gonnet. A new approach to text searching. In *Proc. of 12th ACM SIGIR*, pages 168–175, Cambridge, Mass., June 1989. (Addendum in ACM SIGIR Forum, V. 23, Numbers 3, 4, 1989, page 7.).

[184] R. Baeza-Yates. String searching algorithms revisited. In *Workshop in Algorithms and Data Structures*, F. Dehne, J.-R. Sack, and N. Santoro, editors, Springer LNCS 382, pages 75–96, Ottawa, Canada, August 1989. .

[185] R. Baeza-Yates, G.H. Gonnet. Efficient text searching of regular expressions. In *ICALP'89*, G. Ausiello, M. Dezani-Ciancaglini, and S. Ronchi Della Rocca, editors, Springer LNCS 372, pages 46–62, Stresa, Italy, July 1989.

[186] R. Baeza-Yates. The subsequence graph of a text. In *CAAP'89, XVI Colloquium on Trees, Algebra, and Programming*, Springer NCS 351, pages 104–118, Barcelona, Spain, March 1989.

[187] R. Baeza-Yates, J. Culberson, G. Rawlins. Searching with uncertainty. In R. Karlsson and A. Lingas, editors, *Proceedings SWAT 88, First Scandinavian Workshop on Algorithm Theory, Lecture Notes in Computer Science 318*, pages 176–189, Halmstad, Sweden, July 1988.

[188] R. Baeza-Yates, P.V. Poblete. Reduction of the transition matrix of a fringe analysis and its application to the analysis of 2-3 trees. In *5th International Conference of the Chilean Computer Science Society*, pages 56–82, Santiago, Chile, 1985.

12.7 Selected Invited Papers

[1] Yannis Kalantidis, Ayman Farahat, Lyndon Kennedy, Ricardo Baeza-Yates, David A. Shamma. Visual Congruent Ads for Image Search. In *ICPR 2016*, pp. 1496-1505, Cancún, Mexico, Dec 2016.

[2] Ricardo Baeza-Yates. Towards a Distributed Search Engine. In *Algorithms and Complexity (CIAC 2010)*. Tiziana Calamoneri and Josep Diaz, editors. Springer LNCS 6078, Rome, Italy, May 2010, p. 1–5.

[3] Ricardo Baeza-Yates. The Next Generation of Search. In *Online Information 2009*, London, UK, December 2009, 3-9.

[4] Ricardo Baeza-Yates. User generated content: how good is it? In *WICOW '09: Proceedings of the 3rd workshop on Information credibility on the Web*, Apr 2009. More than **1,000** downloads.

[5] Ricardo Baeza-Yates, Massi Ciaramita, Peter Mika, and Hugo Zaragoza. Towards Semantic Search. In *NLDB 2008*, E. Kapetanios, V. Sugumaran and M. Spiliopoulou, editors. Springer LNCS 5039, London, UK, June 2008, p. 4-11.

[6] Barbara Poblete, Myra Spiliopoulou, Ricardo Baeza-Yates. Website Privacy Preservation for Query Log Publishing. In F. Fogelman-Soulié, D. Perrotta, J. Piskorski, R. Steinberger, editors. Mining Massive Data Sets for Security. NATO Science for Peace and Security Series, D: Information and Communication Security, v. 19, IOS Press, 2008, 130-133.

[7] Ricardo Baeza-Yates, Raghu Ramakrishnan. Data challenges at Yahoo!. In *EDBT 2008*, Nantes, France, Mar 2008, 652-655. More than **1000** downloads.

[8] Ricardo Baeza-Yates, Carlos Castillo, Flavio Junqueira, Vassilis Plachouras and Fabrizio Silvestri. Challenges on Distributed Web Retrieval. In *ICDE 2007*, IEEE Computer Society Press, Estambul, Turkey, 2007, 6–20. More than **130** citations.

[9] Ricardo Baeza-Yates, Paolo Boldi and José María Gómez. Adversarial Retrieval in the Web. Upgrade, February 2007 (Vol. VIII, issue no. 1), pp. 33-40. In Spanish in Novática 185, pp. 29-35. **Best paper of 2007**.

[10] Ricardo Baeza-Yates, Mari Carmen Marcos. The Different Faces of the Web (in Spanish). In *The Human Factor in the Cyberculture*, Margarita Schultz, editor, Alfagrama, Argentina, 65–114, 2007.

[11] Ricardo Baeza-Yates. Graphs from Search Engine Queries. In *SOFSEM 2007: Theory and Practice of Computer Science*, Springer LNCS 4362, Harrachov, Czech Republic, January 2007, 1–8.

[12] Mariano P. Consens, Ricardo Baeza-Yates. Database and Information Retrieval Techniques for XML. In *ASIAN 2005*, China, 22-27.

[13] Ricardo Baeza-Yates. Applications of Web Query Mining. In *European Conference on Information Retrieval (ECIR'05)*, D. Losada, J. Fernández-Luna (editors), Springer LNCS 3408, Santiago de Compostela, Spain, March 2005, 7–22. More than **100** citations.

[14] Ricardo Baeza-Yates, Yoelle S. Maarek, Thomas Roelleke, Arjen P. de Vries. Third edition of the "XML and information retrieval" workshop on integration of IR and DB (WIRD) jointly held with SIGIR'2004, Sheffield, UK, July 29th, 2004. ACM SIGIR Forum, Volume 38 (2), December 2004, 24-30.

[15] Ricardo Baeza-Yates. Challenges in the Interaction of Natural Language Processing and Information Retrieval. CICLING 2004, Springer LNAI 2945, Seoul, Korea, 445–456, February 2004.

[16] Ricardo Baeza-Yates. Web mining in Search Engines. In *Proceedings of the 27th Australasian conference on Computer Science*, vol. 26, Jan 2004. More than **1,500** downloads.

[17] Ricardo Baeza-Yates, Norbert Fuhr, Yoelle S. Maarek. Second edition of the "XML and information retrieval" workshop held at SIGIR'2002, Tampere, Finland, Aug 15th, 2002. ACM SIGIR Forum, Volume 36 (2), Sept 2002, 53-57.

[18] Adelaida Delgado, Ricardo Baeza-Yates. XML Query Languages, *Upgrade* 3(3), 2002.

[19] Ricardo Baeza-Yates, José Miguel Piquer. Agents, Crawlers and Web Retrieval, Cooperative Information Agents (CIA) 2002, LNIA, Springer, Madrid, September 2002.

[20] R. Baeza-Yates, T. Jones, and G. Rawlins. New Approaches to Information Management: Attribute-Centric Data Systems, 7th International Symposium on String Processing and Information Retrieval (SPIRE), IEEE Computer Science Press, pages 18–27, A Coruña, Spain, 27-29 September, 2000.

[21] R. Baeza-Yates. Searching the Web: Challenges and partial solutions. In *IBERAMIA'97*, Helder Coelho, editor, Springer LNAI 1484, 39–51, Lisbon, Portugal, October 1998.

[22] R. Baeza-Yates and A. Benavides. Multimedia in Chile. In *IFIP WG 9.4/5 Workshop: IT for Competitiveness*, Florianopolis, Brazil, Jun 1997. Published in CD-ROM.

[23] R. Baeza-Yates. A unified view of string matching algorithms. In Keith Jeffery, Jaroslav Král, and Miroslav Bartosek, editors, *SOFSEM'96: Theory and Practice of Informatics*, *Springer LNCS 1175*, pages 1–15, Milovy, Czech Republic, November 1996.

[24] R. Baeza-Yates, J.M. Piquer, E. Vera, Y. Inuoe, K. Wakabayashi, and K. Hagishima. AccessNova: ATM experiments in Chile. In *Third Workshop on Protocols for Multimedia Systems (PROMS'96)*, E. Pastor A. Azcorra, T. De Miguel and E. Vázquez, editors, pages 311–319, Madrid, Spain, October 1996.

[25] R. Baeza-Yates, J.M. Piquer, E. Vera, E. Makino, and Y. Inuoe. AccessNova: Broadband networks and multimedia services experiments in Chile. In *IFIP World Congress 1996: Advanced IT Tools*, N. Terashima and E. Altman, editors, pages 106–113, Canberra, Australia, September 1996. Chapman and Hall.

[26] R. Baeza-Yates, R. Gavaldá, and G. Navarro. Bounding the expected length of longest common subsequences and forests. In N. Ziviani, R. Baeza-Yates, and K. Guimarães, editors, *Proc. of WSP'96*, pages 1–15, Recife, Brazil, August 1996.

[27] R. Baeza-Yates. How to teach algorithms. Invited paper in IV Ibero-American Congress on CS Higher Education, Canela, Brasil, 1995, 51–60.

[28] R. Baeza-Yates and H. Von Borries. Object orientation in Chile. *First Class, OMG Newsletter*, 4(4):12/17, Dec 1994.

[29] R. Baeza-Yates. Space-time trade-offs in text retrieval. In *Proc. of First South American Workshop on String Processing*, pages 15–21, Belo Horizonte, Brazil, September 1993.

[30] R. Baeza-Yates. Applications of Markov chains to the analysis of algorithms. In *Pan-American Workshop in Applied and Computational Mathematics*, Caracas, Venezuela, January 1993.

12.8 Theses

[1] R.A. Baeza-Yates. *Efficient Text Searching*. PhD thesis, Dept. of Computer Science, University of Waterloo, May 1989. Also as Research Report CS-89-17. More than **70** citations.

[2] R.A. Baeza-Yates. Portable graphical editor for three dimensional objects. Master's thesis, Dept. of Electrical Engineering, University of Chile, Santiago, Chile, April 1986. (in Spanish).

[3] R.A. Baeza-Yates. Analysis of algorithms in search trees. Master's thesis, Dept. of Computer Science, University of Chile, Santiago, Chile, January 1985. (in Spanish).

13 Teaching Record

I have taught the following undergraduate courses in Spanish at Universidad de Chile (1985-2004) and Universitat Pompeu Fabra, Spain (2005-14) (most recent first, although many were taught more than once): Information Retrieval (also taught in English at University of Canterbury, New Zealand, in 2004), Data Structures, Design and Analysis of Algorithms, Bioinformatics, Introduction to Computer Programming, Software Project, Object Oriented Programming, Software Workshop on Graphical Interfaces, Computer Architecture, Automata Theory and Formal Languages, Design and Construction of Compilers, Information Systems, Programming Languages, Introduction to Computer Graphics, Numerical Algorithms, Digital Systems, Operating Systems, and Software Tools.

The courses on Computer Graphics (1985), Object Oriented Programming (1990), Software Workshop on Graphical Interfaces (1991), Problem Solving Seminar (1993), Visualization Seminar (1997), and Bioinformatics (2001) were incorporated to the computer engineering studies of Universidad de Chile by myself, as well as the current M.Sc. curricula while being the graduate coordinator. The course of Information Retrieval was incorporated in the curricula of Universitat Pompeu Fabra by myself in 2005.

I have taught the following graduate courses (university, language and years are indicated): Web Retrieval and Data Mining (Universitat Pompeu Fabra, English, 2010-14), Web Search (Univ. Carlos III, Spain, Spanish, 2005-07), Advanced Data Structures, Problem Solving Seminar, Visualization Seminar and Text Searching Seminar (Universidad de Chile, Spanish, 1990-95).

Have been professor of the CS Ph.D. programs at University Carlos III, Madrid, Spain; Univ. Rovira i Virgili, Tarragona, Spain; Polytechnic Univ. of Madrid, Spain; Polytechnic Univ. of Catalunya, Spain; and Catholic University, Santiago, Chile.

14 Theses and Student Projects Supervised

14.1 Ph.D.

1. Diana Ramírez-Cifuentes. A Data Driven Framework for Mental Health States Assessment in Social Platform. Ph.D. in Computer Science, Univ. Pompeu Fabra, Barcelona, Spain, July 2022. Co-advisor: Ana Freire.

2. Maria Rauschenberger. Early Screening of Dyslexia using a Language-Independent Content Game and Machine Learning. Ph.D. in Computer Science, Univ. Pompeu Fabra, Barcelona, Spain, October 2019. Co-advisor: Luz Rello.

3. Necati Bora Edizel. Word Embeddings with Applications to Web Search and Advertising. Ph.D. in Computer Science, Univ. Pompeu Fabra, Barcelona, Spain, July 2019. Co-advisor: Amin Mantrach.

4. Ioanna Tsalouchidou. Temporal Analysis of Dynamic Large Graphs. Ph.D. in Computer Science, Univ. Pompeu Fabra, Barcelona, Spain, October 2018. Co-advisor: Francesco Bonchi.

5. Lorena Recalde. Modeling User Preferences in Online Social Networks. Ph.D. in Computer Science, Univ. Pompeu Fabra, Barcelona, Spain, October 2018. Co-advisor: David Nettleton.

6. Zeinab Liaghat. Quality-Efficiency Trade-offs in Machine Learning Applied to Text Processing. Ph.D. in Computer Science, Univ. Pompeu Fabra, Barcelona, Spain, March 2017.

7. Çigdem Aslay. From Viral Marketing to Social Advertising: Ad Allocation under Social Influence. Ph.D. in Computer Science, Univ. Pompeu Fabra, Barcelona, Spain, December 2016. Co-advisor: Francesco Bonchi.

8. Adiya Abisheva. Opinion Polarization in Online Communities. Ph.D. in Sciences, ETH Zurich, Switzerland, December 2016. Main advisor: Frank Schweitzer.

9. Yasir Mehmood. Modeling the Roles of Users and Groups in the Dynamics of Information Propagation. Ph.D. in Computer Science, Univ. Pompeu Fabra, Barcelona, Spain, April 2016. Co-advisor: Francesco Bonchi.

10. Eduardo Graells-Garrido. Biased Behavior in Web Activities: From Understanding to Unbiased Visual Exploration. Ph.D. in Computer Science, Univ. Pompeu Fabra, Barcelona, Spain, May 2015. Co-advisor: Mounia Lalmas.

11. Janette Lehmann. From Site to Inter-site User Engagement: Fundamentals and Applications. Ph.D. in Computer Science, Univ. Pompeu Fabra, Barcelona, Spain, February 2015. Co-advisor: Mounia Lalmas.

12. Ruth García-Gavilanes. User Behavior in Microblogging with a Cultural Emphasis. Ph.D. in Computer Science, Univ. Pompeu Fabra, Barcelona, Spain, February 2015.

13. Michele Trevisiol. Exploiting Implicit User Activity for Media Recommendation. Ph.D. in Computer Science, Univ. Pompeu Fabra, Barcelona, Spain, October 2014. Co-advisor: Alejandro Jaimes.

14. Luca Chiarandini. Characterizing and Modelling Web Sessions with Applications. Ph.D. in Computer Science, Univ. Pompeu Fabra, Barcelona, Spain, October 2014. Co-advisor: Alejandro Jaimes.

15. Luz Rello. Dyswebxia: A Text Accessibility Model for People with Dyslexia. Ph.D. in Computer Science, Univ. Pompeu Fabra, Barcelona, Spain, June 2014. Co-advisor: Horacio Saggion.

16. Diego Saéz-Trumper. Finding Relevant People in Online Social Networks. Ph.D. in Computer Science, Univ. Pompeu Fabra, Barcelona, Spain, December 2013.

17. Hossein Vahabi. Recommendation Techniques for Web Search and Social Media. Ph.D. in Computer Science, Institute for Advanced Studies, Lucca, Italy. July 2012. Co-advisor: Fabrizio Silvestri.

18. Liliana Calderón-Benavides. Unsupervised Identification of the User's Query Intent in Web Search. Ph.D. in Computer Science, Univ. Pompeu Fabra, Barcelona, Spain, September 2011.

19. Cristina González-Caro. Supervised Identification of the User Intent of Web Search Queries. Ph.D. in Computer Science, Univ. Pompeu Fabra, Barcelona, Spain, September 2011.

20. Ximena Olivares. Large Scale Image Retrieval based on User Generated Content. Ph.D. in Computer Science, Univ. Pompeu Fabra, Spain, March 2011. Co-advisor: Roelof Van Zwol.

21. Víctor Pascual. Visual Exploration of Web Spaces. Ph.D. in Computer Science, Univ. Pompeu Fabra, Spain, December 2010. Co-advisor: Juan Carlos Dürsteler.

22. Ilaria Bordino. Graph Mining and Its Application to the Web. Ph.D. in Computer Science, Universitá di Roma "La Sapienza", Italy, and Univ. Pompeu Fabra, Spain, June 2010. Co-advisor: Stefano Leonardi.

23. Barbara Poblete. Query Based Data Mining for the Web. Ph.D. in Computer Science, Univ. Pompeu Fabra, Spain, October 2009. Co-advisor: Myra Spiliopoulou.

24. Omar Alonso. Temporal Information Retrieval. Ph.D. in Computer Science, Univ. of California at Davis, USA, September 2008. Co-advisor: Michael Gertz.

25. Alvaro Pereira Jr. A Model for Fast Web Mining Prototyping: Design, Algebra, Implementation and Use Cases. Ph.D. in Computer Science, Univ. Federal de Minas Gerais, Brazil, September 2008. Co-advisor: Nivio Ziviani.

26. Mendoza, Marcelo. Query Log Mining in Search Engines. Ph.D. in Computer Science, Univ. de Chile, June 2007. Co-advisor: Carlos Hurtado.

27. Badue, Claudine. Design and Analysis of Web Search Systems. Ph.D. in Computer Science, Univ. Fed. de Minas Gerais, Brazil, February 2007. Main advisor: Nivio Ziviani.

28. Castillo, Carlos. Effective Web Crawling, Ph.D. in Computer Science, Univ. de Chile, November 2004.

29. Chávez, Edgar. Similarity Searching on Metric Spaces, Ph.D. in Computer Science, CIMAT, México, September 1999. Co-advisor: José Luis Marroquín.

30. Vegas, Jesús. An Information Retrieval System on Structure and Content (in Spanish), Ph.D. in Computer Science, Univ. de Valladolid, Spain, May 1999. Main advisor: Pablo de la Fuente.

31. Navarro, Gonzalo. Approximate Text Searching, Ph.D. in Computer Science, Univ. de Chile, December 1998.

32. Barbosa, Eduardo. Efficient Text Retrieval Methods for Secondary Memory, Ph.D. in Computer Science, Univ. Fed. de Minas Gerais, Brazil, July 1995. Main advisor: Nivio Ziviani.

14.2 M.Sc.

Some of them are in Spanish:

1. Aida Sharif Rohani. Bias Measurement in Small Datasets. M.Sc. in Computer Science, Northeastern University at Silicon Valley, January 2021.

2. Martí Mayo. Feasibility of Word Difficulty Prediction. Master Program in Intelligent Interactive Systems, Universitat Pompeu Fabra, September 2014.

3. Nacati Bora Edizel. Enriching User Profiles for News Personalization. Master Program in Intelligent Interactive Systems, Universitat Pompeu Fabra, September 2014. Co-advisor: Berkant Barla Cambazoglu.

4. Guillem Frànces. A Machine Learning Approach for Query Forwarding on Distributed Search Engines. Master Program in Intelligent Interactive Systems, Universitat Pompeu Fabra, September 2013. Co-advisor: Berkant Barla Cambazoglu.

5. David Martín-Borregón. Space and Time Clusterization of Social Media Groups. Master Program in Intelligent Interactive Systems, Universitat Pompeu Fabra, September 2013. Co-advisor: Luca Aiello.

6. Sandra Gilabert. Analysis of Temporal User Habits from Query Logs. Master Program in Intelligent Interactive Systems, Universitat Pompeu Fabra, September 2013. Co-advisor: Peter Mika.

7. Sarigiannis Charalampos. Network and Performance Analysis of a Multi-site Web Search Engine, Master Program in Information, Communication and Audiovisual Media Technologies, Universitat Pompeu Fabra, September 2008.

8. Cristina Monter Oliver. The intention behind Web queries: methodology for the creation of a use taxonomy. Master in Digital Content Management, University of Barcelona, September 2008.

9. Poblete, Bárbara. A Query Mining Tool for the Design of the Content and Structure of Web Sites, M.Sc. in Computer Science, Univ. of Chile, Chile, November 2004. Won the second place award to the best M.Sc. thesis in Latinamerica in 2005.

10. Acuña, Vicente. C-rewriting and Classification by Context, M.Sc. in Computer Science, Univ. of Chile, Chile, November 2004. Co-supervised with Alejandro Maass.

11. Cuquejo, Virna. Data Structures and Algorithms to Search Similar Objects in Metric Spaces, M.Sc. in Computer Science, Univ. of Chile, Chile, November 2000. Co-supervised with Gonzalo Navarro.

12. Alonso, Omar. A Model for Document Visualization in WWW, M.Sc. in Computer Science, Univ. of Chile, Chile, December 1999.

13. Mecoli, Claudio. DomainView: A User Interface Metaphor based on Domains, M.Sc. in Computer Science, Univ. of Chile, Chile, December 1999.

14. Beck, Héctor. The Problem of Minimum Cost Spanning 2-Tree and Isolated Failure Inmune Networks, M.Sc. in Computer Science, Univ. of Chile, Chile, December 1998.

15. Barros, Alejandro. Change of Milenium: A Methodological Approach, M.Sc. in Computer Science, Univ. of Chile, Chile, May 1998.

16. Scheihing, Rodrigo. Study of some Combinatorial Problems in Strings, M.Sc. in Computer Science, Univ. of Chile, Chile, August 1996.

17. Hochsztain, Esther. A Database Approach via graph views in Persistent C++, M.Sc. in Computer Science, Univ. of Chile, Chile, December 1995. Co-supervised with Hermann Steffen (Univ. de la República, Uruguay).

18. Valmadre, Gastón. Visual Debugging and Program Animation, M.Sc. in Computer Science, Univ. of Chile, Chile, October 1995.

19. Navarro, Gonzalo. A Query Language for Structure and Contents of Text Databases, M.Sc. Computer Science, Univ. of Chile, April 1995. Won the award to the best M.Sc. thesis in Latinamerica in 1996.

20. Araya, Gladys. Evaluation of Tools for GUI Construction, M.Sc. Computer Science, Univ. of Chile, 1994. Co-supervised with Juan Alvarez.

21. Soza, Héctor. Analysis of Linear Hashing, M.Sc. Computer Science, Univ. of Chile, 1993. Won the award to the best M.Sc. thesis in Latinamerica in 1994.

22. Fuentes, Luis. A System for Animation of Text Algorithms, M.Sc. Computer Science, Univ. of Chile, 1992.

23. Marín, Mauricio. Design of a Specialized System for Event Driven Molecular Dynamics, M.Sc. Computer Science, Univ. of Chile, 1992. Co-supervised with Patricio Cordero.

14.3 Final Engineering Projects

All of them are in Spanish:

1. Villar, Osvaldo. Mining and Personalization of a Website for Ringtones, Computer Engineering degree, Univ. of Chile, December 2007.

2. Galleguillos, Carolina. Information Extraction from the Web: Identification of Specific Content in a Non Structured Text, Computer Engineering degree, Univ. of Chile, August 2005.

3. Loira, Nicolás. Design and Implementation of a Combinatorial Algorithm to Find Patterns in Electrophoresis Images, Computer Engineering degree, Univ. of Chile, August 2005.

4. Salinger, Alejandro. A Simple Alphabet Independent Compressed Index, Computer Engineering degree, Univ. of Chile, 2005. Co-advisor (Advisor: Gonzalo Navarro).

5. Herskovic, Valeria. A Visual Query Language for XQuery, Computer Engineering degree, Univ. of Chile, April 2005.

6. Barrera, Cristián. Web Visualization of XML Documents using Fisheye Trees, Computer Engineering degree, Univ. of Chile, April 2005.

7. Paredes, Carla. Tool for Advertising in Search Engines based in Query Analysis, Computer Engineering degree, Univ. of Chile, April 2005.

8. Graves, Alvaro. Data Mining for Web Sites Oriented to Services, Computer Engineering degree, Univ. of Chile, January 2005.

9. Davis, Emilio. A New Web Search Model with Static Ranking, Computer Engineering degree, Univ. of Chile, August 2003.

10. Collado, Miguel Angel. Management of a Control Software Project, Computer Engineering degree, Univ. of Chile, December 2002.

11. Benoit, Nicole. Study of the relation between protein palindromy and their structure and function, Biotechnology and Chemistry Engineering degree, Univ. of Chile, Oct 2002.

12. Muñoz, Francisca. Development of an Hybrid Data Structure for Searching in Metric Spaces, Computer Engineering degree, Univ. of Chile, 2002. Co-advisor (Advisor: Gonzalo Navarro).

13. Ortega, Manuel. Implementation of a XML Query Language based in Proximal Nodes, Computer Engineering degree, Univ. of Chile, 2002. Co-advisor (Advisor: Gonzalo Navarro).

14. Saint-Jean, Felipe. Mining the Web with Applications to a Search Engine, Computer Engineering degree, Univ. of Chile, May 2002.

15. Castillo, Carlos. Characterizing the Chilean Web and Extensions to a Web Search Engine, Computer Engineering degree, Univ. of Chile, October 2000.

16. Vásquez, Mauricio. Integration of a Search Engine to a Web Application, Computer Engineering degree, Univ. of Chile, November 1998.

17. Quezada, Gastón. Design and Implementation of a C Preprocessor for Program Animation, Computer Engineering degree, Univ. of Chile, November 1995.

18. De Saint-Pierre, Didier. Design and Implementation of a Workflow applied to Electrical Distribution of Energy, Computer Engineering degree, Univ. of Chile, 1994.

19. Aguilar, Waldo. Animation of Dynamic Data Structures, Computer Engineering degree, Univ. of Chile, 1992.

15 Editorial Boards

I am editor of the following journals: Information Systems (Elsevier, Netherlands) since 2002, Computing (Springer, Germany) since 2013, Journal of Web Engineering (USA) since 2002, Theoretical Informatics and Applications - RAIRO (France) since 1998. Grammars (Netherlands) since 2004, Journal of the SBC (Brazil) since 2002, First Monday (USA) since 2001, and El Profesional de la Información (Spain) since 2003.

I was the first Editor-in-Chief of the CLEI Electronic Journal at `www.clei.cl` from 1998 to 2005. I also was member of the editorial boards of ACM Transactions on Information Systems (ACM, USA) from

2002 to 2014, Information Processing & Management (Elsevier, Netherlands) from 2005 to 2011 (since 2007 as Associated Editor), VLDB Journal (Springer, Germany) from 2001 to 2007, Computer Science Review (Elsevier, Netherlands) from 2013 to 2014, Information Technology for Development (Netherlands), International Journal of Web Information Systems (UK), Journal of Digital Management (India-South Korea) from 2003 to 2005, Computación y Sistemas (México), Novática (Spain), Revista de la SCCC (Chile) and Revista Colombiana de Informática (Colombia).

16 Selected Keynotes

- "The Shades of AI and Ist Challenges" (in Spanish), Congress of the Future, Santiago, Chile, Jan 2024. YouTube: `https://www.youtube.com/watch?v=ms3MmgP7Fhw`.
- "Responsible AI: Challenges & Recommendations", Digital Humanism Seminar, Vienna, Austria, Jun 2023. YouTube: `https://www.youtube.com/watch?v=UbgxJyGNaSs`.
- "Ethics in AI: A Challenging Task", Keynote at ECIR 2021, Lucca, Italy, Mar 2021. YouTube: `https://www.youtube.com/watch?v=tTvrec7VMZI`.
- "Bias on Search and Recommender Systems", Keynote at RecSys 2020, Rio de Janeiro, Brasil, Jun 2020. YouTube: `https://www.youtube.com/watch?v=8zetbdx4_08&t=60s`.
- Bias in the Web, Gödel Annual Seminar, Wien, Austria, Jun 2017. YouTube: `https://www.youtube.com/watch?v=CguWbbQeruM`.
- "Data Monopoly: A New Power?" (in Spanish), The Congress of the Future, Santiago, Chile, Jan 2016. YouTube: `https://www.youtube.com/watch?v=fFlkOKUa2M0`.
- "Does Big Data Empowers the Web?" (in Spanish), TEDx Barcelona, July 2015. YouTube: `https://www.youtube.com/watch?v=JvO1P8yGVqA` (more than **4,000** views).
- Invited speaker or tutorial teacher at many conferences including ACM SIGIR, WWW, ACM WSDM, VLDB, ACM CIKM, ACM Recsys, SDM, ACM Hypertext, ACM Web Science, ECDL, ICDE, ECIR, ECML/PKDD, ESWC, UMAP, ICWE, EDBT, ISSI, SPIRE, CIAC, CLEF, NLDB, SAMT, SSDBM, SISAP, ICTIR, DSAI, ICWI, WISE, CRWIG, Simultools, SRDS, IDA, LA-WEB, etc.; as well as in many workshops.
- Invited speaker in many professional events related to the Web, search technology, and innovation in several countries: Brazil, Chile, Finland, Italy, Mexico, Netherlands, Spain, Switzerland, United Kingdom, and USA.

17 Service at Conferences

- Member of the steering committees of ACM CIKM (since 2014), ICWSM (since 2014), SPIRE since 1998 (co-founder), AMW since 2006 (co-founder), OAIR since 2011, ESSIR since 2009, and LA-WEB since 2003 (founder). I was part of the steering committee of ACM WSDM from 2008 to 2017 (co-founder) and LATIN from April 1995 to March 2006.

- Conference co-chair of The Web Conference 2019 (formerly WWW), San Francisco, USA, May 2019; Conference co-chair of IEEE Big Data 2017, Boston, USA, Dec 2017; Co-organizing chair of ESSIR 2017, Barcelona, Spain, Sep 2017; Conference co-chair of IEEE ICDM 2016, Barcelona, Spain, Dec 2016; Conference chair of ACM SIGIR 2015, Santiago, Chile, Aug 2015; Conference chair of LA-WEB 2014, Ouro Preto, Brazil, Oct 2014; Conference chair of AMW 2014, Cartagena de Indias, Colombia, Jun 2014; Conference chair of LA-WEB 2012, Cartagena de Indias, Colombia, Oct 2012; Conference chair of ECIR 2012, Barcelona, Spain, Apr 2012; Co-organizing chair of ESSIR 2009, Padova, Italy, Sep 2009; Conference chair of ACM WSDM 2009, Barcelona, Spain, Feb 2009; Conference chair of LA-WEB 2008, Vila Velha, Brazil, Oct 2008; Conference chair of SPIRE 2007 and LA-WEB 2007 (collocated) Santiago, Chile, Oct 2007; Conference co-chair of ACM SIGIR 2015 in Bahia, Brazil, Aug 2005; Conference chair of the first Latin American Web conference (LA-WEB 2003) in Santiago, Chile, Nov 2003; Conference co-chair of IEEE PROMSMmNet'97, Santiago, Chile, Nov 1997; Conference co-chair of LATIN'95, Viña del Mar, Chile, Apr 1995; Conference chair of the 2nd South American Workshop on String Processing, Viña del Mar, Chile, Apr 1995; and Conference chair of the XI International Conference of the Chilean Computer Science Society, Santiago, Chile, Oct 1991.

- Panels Co-chair for The Web Conference 2021 (Ljubjana, Slovenia, May 2021); Applied Research co-chair for CIKM 2020 (Galway, Ireland, Oct 2020); Tutorials co-chair for ASONAM 2018 (Barcelona, Spain, Sep 2018); Tutorials co-chair for WWW 2015 (Florence, Italy, May 2015); Workshops co-chair for WWW 2014 (Seoul, South Korea, Apr 2014); Program committee co-chair for WWW 2013 (Rio de Janeiro, Brazil, May 2013); Industry and EU projects tracks co-chair for WWW 2012 (Lyon, France, April 2012); Program committee co-chair for SIGIR 2011 (Beijing, China, Jul 2011); Program committee co-chair for ICWSM 2011 (Barcelona, Spain, Jul 2011); Tutorial chair for WWW 2010 (Raleigh, USA, Apr 2010); Program committee chair for ACM Web Intelligence & Internet Agent Technology (Milano, Italy, September 2009); Industrial track PC co-chair for KDD 2009 (Paris, France, June 2009); Ibero-American track co-chair for WWW 2009 (Madrid, April 2009); Workshops co-chair for WWW 2008 (Beijing, China, Apr 2008); Program committee vice-chair for ICDM 2008 (Pisa, Italy, December 2008); Program committee co-chair for CIKM 2007 (Lisbon, Portugal, November 2007); Program committee co-chair for the Mexican Computer Science Conference (ENC 2004, Colima, Mexico, September 2004); Program committee co-chair for the First Latin-American Web Conference (LA-WEB, Santiago, Chile, November 2003); Program committee co-chair for the Combinatorial Pattern Matching (CPM, Morelia, Mexico, June 2003); Program committee chair for the Americas of the ACM Conference in Information Retrieval (SIGIR, Tampere, Finland, Aug 2002); Program committee co-chair of IFIP TCS'2002 (Montreal, Canada, Aug 2002); Program committee chair of the XXI Int. Conf. of the Chilean Computer Science Society (Punta Arenas, Chile, Nov 2001); Program committee chair of the XVII Int. Conf. of the Chilean Computer Science Society and the Fourth South American Workshop on String Processing (Valparaíso, Chile, Nov 1997); Program co-chair of LATIN'95, Viña del Mar, April, 1995. Program committee chair of the XIII Int. Conf. of the Chilean Computer Science Society (La Serena, October 1993), and the 1st South American Workshop on String Processing (Belo Horizonte, Brazil, September 1993).

- Founder and organizer of the Future of Web Search workshop: Barcelona (2006), Bertinoro (2007), Andorra (2008) and Ibiza (2009), which continued as the Future of the Social Web workshop

(Barcelona, 2011).

- Co-organizer of the first two XML Retrieval workshops at SIGIR in 2000 and 2002. Co-organizer of the first workshop of Content Analysis in the Web 2.0 at WWW 2009. Co-organizer of the Temporal Web workshops at WWW since 2011. Co-organizer of the first CrowdSearch workshop at WWW 2012.

- Program Committee member of: WSDM 2021 (senior member, Jerusalem, Israel, Mar 2021); ECAI 2020 (senior member, Santiago de Compostela, Spain, Sep 2020); TheWebConf 2020 (senior member, Taipei, Taiwan, Apr 2020); SIGIR 2019 (senior member, Paris, France, Jul 2019); SIRIP 2019 (member, Paris, France, Jul 2019); WebSci 2019 (senior member, Boston, USA, Jun 2019); WSDM 2019 (senior member, Melbourne, Australia, Feb 2019); SPIRE 2018 (Lima, Peru, Oct 2018); KDD 2018 (senior member, London, UK, Aug 2018); SIGIR 2018 (senior member, Ann Arbor, USA, Jul 2018); WWW 2018 (senior member, Lyon, France, Apr 2018); WSDM 2018 (senior member, Marina del Rey, USA, Feb 2018); SIGKDD Doctoral Dissertation Awards Committee (2017); SIGIR 2017 (senior member, Tokyo, Japan, Aug 2017); WebSci 2017 (senior member, Troy, USA, Jun 2017); ICWSM 2017 (senior member, Montreal, Canada, May 2017); WSDM 2017 (senior member, Cambridge, UK, Feb 2017); ICWSM 2016 (senior member, Cologne, Germany, May 2016); WSDM 2016 (senior member, San Francisco, USA, Feb 2016); KDD 2015 (Sydney, Australia, Aug 2015); WWW 2015 (track co-chair, Florence, Italy, May 2015); ICWSM 2012 (senior member, Oxford, UK, May 2015); WSDM 2015 (senior member, Shanghai, China, Feb 2015); SPIRE 2014 (Ouro Preto, Brazil, Oct 2014); KDD 2014 (New York, USA, Aug 2014); ICWSM 2014 (senior member, Ann Arbor, USA, Jun 2014); LATIN 2014 (Montevideo, Uruguay, May 2014); SPIRE 2013 (Israel, Oct 2013); ICWSM 2013 (senior member, Cambridge, USA, Jul 2013); CICLING 2013 (Samos, Greece, Mar 2013); EDBT 2013 (Genoa, Italy, Mar 2013); ICDM 2012 (Brussels, Belgium, Dec 2012); CIKM 2012 (Maui, USA, Nov 2012); SPIRE 2012 (Cartagena, Colombia, Oct 2012); ICWSM 2012 (senior member, Dublin, Ireland, Jun 2012); WAW 2012 (Halifax, Canada, Jun 2012); ICWSM 2012 (senior member, Dublin, Ireland, Jun 2012); CERI 2012 (Valencia, Spain, Jun 2012) LATIN 2012 (Arequipa, Perú, Apr 2012); WWW 2012 (senior member, Lyon, France, Apr 2012); WSDM 2012 (senior member, Seattle, USA, Feb 2012); CICLing 2012 (Delhi, India, Feb 2012); SPIRE 2011 (Pisa, Italy, Oct 2011); VLDS 2011 (Seattle, USA, Sep 2011); KDD 2011 (industrial track, San Diego, USA, Aug 2011); EDBT 2011 (Saint Petersburg, Russia, May 2011); ECIR 2011 (Dublin, Ireland, Apr 2011); EDBT 2011 (Uppsala, Sweden, Mar 2011); WSDM 2011 (senior member, Hong Kong, China, Feb 2011); PDP 2011 (Ayia Napa, Cyprus, Feb 2011); ICDM 2010 (Sydney, Australia, Dec 2010); EHealth 2010 (Casablanca, Morocco, Dec 2010); JCC 2010 (Antofagasta, Chile , Nov 2010); SBBD 2010 (Belo Horizonte, Brazil, Nov 2010); SPIRE 2010 (Los Cabos, Mexico, Oct 2010); KDD 2010 (senior member, Washington DC, USA, Jul 2010); LSDR-IR 2010 (Geneva, Switzerland, Jul 2010); SIGIR 2010 (Geneva, Switzerland, Jul 2010); FUN 2010 (Ischia, Italy, Jun 2010); CERI 2010 (Madrid, Spain, Jun 2010); AMW 2010 (Buenos Aires, Argentina, May 2010); IRFC-2010 (Vienna, Austria, May 2010); WWW 2010 (Raleigh, USA, Apr 2010); LATIN 2010 (Oaxaca, Mexico, Apr 2010); ECIR 2010 (Milton Keynes, UK, Mar 2010); PDP 2010 (Pisa, Italy, Feb 2010); ICDM 2009 (Miami, USA, Dec 2009); CIKM 2009 (Hong Kong, China, Nov 2009); DAMIEN 2009 (Riga, Latvia, Sep 2009); VLDB 2009 (Lyon, France, Aug 2009); SPIRE 2009 (Saariselkä, Finland, Aug 2009); SIGIR 2009 (Boston, USA, Jul 2009); LSDS-IR 2009 (Boston, USA, Jul 2009); CPM 2009 (Lille, France, Jun 2009); AMW 2009 (Arequipa. Perú, May 2009); EDBT 2009 (Saint Petersburg, Russia, May 2009); WWW 2009 (Madrid, Spain, Apr 2009); SIAM SDM 2009 (Sparks, USA, Apr 2009); ECIR 2009 (Toulouse, France, Apr 2009); ER 2008 (Demos, Barcelona, Spain, Sep 2008); TCS 2008 (Milano, Italy, Sep 2008); ECML/PKDD 2008 (Antwerp, Belgium, Sep 2008); CharLA 2008 (Buenos Aires, Argentina, Sep 2008); WebKDD 2008 (Las Vegas, USA, Aug 2008); PersDB 2008 (Auckland, NZ, Aug 2008); SIGIR 2008 (Singapore, Jul 2008); AWIC 2008 (Cape Town, South Africa, Jul 2008); ACM Hypertext 2008 (Senior member, Pittsburgh, USA, Jun 2008); CPM 2008 (Pisa, Italy, Jun 2008); ECIR 2008 (Glasgow, Scotland, Apr 2008); ACM SAC 2008 (Fortaleza, Brazil, Mar 2008); ACM WSDM 2008 (Stanford, USA, Feb 2008); WebKDD/SNAKDD 2007 (San Jose, Aug 2007); SIGIR 2007 (Amsterdam, Netherlands, Jul 2007); LSDS-IR 2007 (Amsterdam, Netherlands, Aug 2007); PODS 2007 (Beijing, China, Jun 2007); WEA 2007 (Rome, Italy, Jun 2007); AWIC 2007 (Fontainebleau, France, Jun 2007); Infoscale 2007 (Suzhou, China, Jun 2007); WWW 2007 (Banff, Canada, May 2007); ECIR 2007 (Rome, Italy, Apr 2007); MMOIR 2007 (Hyderabad, India, Jan 2007); CIKM 2006 (Arlington, USA, Nov 2006); SPIRE 2006 (Glasgow, Scotland, Oct 2006); LA-WEB 2006 (Puebla, Mexico, Oct 2006); HLT-EMNLP 2005 (Vancouver, Canada, Oct 2006); ECDL 2006 (Alicante, Spain, Oct 2006); UKDU 2006 (Berlin, Germany, Sep 2006); VLDB 2006 (Seoul, South Korea, Sep 2006); SIGIR 2006 (Seattle, USA, Aug 2006); AMCIS 2006 (Acapulco, Mexico, Aug 2006); WebKDD 2006 (Philadelphia, USA, Aug 2006); CPM 2006 (Barcelona, Spain, Jun 2006); WWW 2006 (Edinburgh, UK, May 2006); ICEIS 2006 (Paphos, Cyprus, May 2006); ACM SAC 2006 (Dijon, France, Apr 2006); ECIR 2006 (London, UK, Apr 2006); EDBT & DataX 2006 (MUnich, Germany, Mar 2006); ALENEX 2006 (Miami, USA, Jan 2006); COMAD 2005b (Hyderabad, India, Dec 2005); SCCC 2005 (Valdivia, Chile, Nov 2005); AIRS 2005 (Jeju Island, South Korea, Oct 2005); ECDL 2005 (Vienna, Austria, Sep 2005); XSym 2005 (Trondheim, Norway, Aug 2005); SBC-BSB 2005 (Brazil, Jul 2005); ICEIS 2005 (Miami, USA, May 2005); ECIR 2005 (Santiago de Compostela, Spain, Mar 2005); ACSC 2005 (Newcastle, Australia, Jan 2005); LA-WEB 2004 (Ribeirao Preto, Brazil, Nov 2004); AIRS 2004 (Beijing, China, Oct 2004); SPIRE 2004 (Padova, Italy, Oct 2004); ECDL 2004 (Bath, UK, Sep 2004); WebDB 2004 (Paris, France, Jun 2004); 3rd Web Dynamics workshop (New York, USA, May 2004); AWIC 2004 (Cancun, Mexico, May 2004); ICEIS 2004 (Porto, Portugal, Apr 2004); ECIR 2004 (Sunderland, England, Apr 2004); Workshop on Database Technologies for Handling XML information on the Web (Heraklion, Greece, Mar 2004); SPIRE 2003 & SBBD'2003 (Manaus, Brazil, Oct 2003); ECDL 2003 (Trondheim, Norway, Aug 2003); CIA 2003 (Helsinki, Finland, Aug 2003); SIGIR 2003 (Toronto, USA, Jul 2003); WWW 2003 (Budapest, Hungary, May 2003); 1st Atlantic Conference on Web Mining Conference (Madrid, Spain, May 2003); PAKDD 2003 Workshop on Knitting Web Linkages (Seoul, South Korea, May 2003) ICEIS 2003 (Angers, France, Apr 2003); HIS 2002 (Santiago, Chile, Dec 2002); Information and Knowledge Sharing - IKS (St. Thomas, US Virgin Islands, Nov 2002); Spanish Workshop on Digital Libraries (El Escorial, Spain, Nov 2002); ECDL 2002 (Rome, Italy, Sep 2002); SPIRE 2002 (Lisbon, Portugal, Sep 2002); ICALP 2002 (Málaga, Spain, Jul 2002); ICEIS 2002 (Ciudad Real, Spain, Apr 2002); SIAM IWAP 2002 (Caracas, Venezuela, Jan 2002); 2nd Int. Conf. on Web Information Systems (Kyoto, Japan, Dec 2001); 6th On-line World Conference on Soft Computing in Industrial Applications (WSC6), 2001; SIGIR 2001 (New Orleans, USA, Sept 2001); VLDB 2001 (Rome, Italy, Sept 2001); CIA 2001 (Modena, Italy, Sept 2001); ALCOM 2001 (San José, Costa Rica, May 2001); ICDE 2001 (Heidelberg, Germany, Apr 2001); WIIW (Rio de Janeiro, Brazil, Apr 2001);

CICLing 2001 (Mexico City, Mexico, Jan 2001); FQAS 2000 (Warsaw, Poland, Oct 2000); SBBD 2000 (Joao Pessoa, Brazil, Oct 2000); SPIRE 2000 (A Coruña, Spain, Sept 2000); IFIP TCS2000 (Tokyo, Japan, Aug 2000); ACM SIGIR 2000 (Athens, Greece, Jul 2000); EDBT 2000 (Konstanz, Germany, Mar 2000); ICIS'99 (Charlotte, USA, Dec 1999); SPIRE'99 (Cancun, Mexico, Sept 1999); ISCA PDCS'99 (Fort Lauderdale, USA, Aug 1999); ACM SIGIR'99 (San Francisco, USA, 1999); ACM SIGMOD'99 (Philadelphia, USA, 1999); ACM CIKM'98 (Baltimore, USA, Nov 1998); 6th Ibero-American Congress on Higher CS Education (Quito, Ecuador, Oct. 1998); SPIRE'98 (Sta. Cruz, Bolivia, Sept 1988); ACM SIGIR'98 (Melbourne, Australia, Aug 98); COCOON'98 (Taiwan, Aug 98); VLDB'98 (New York, USA, Aug 1998); Combinatorial Pattern Matching, CPM'98 (Rutgers, USA, Jul 1998); 4th IFIP 2.6 Working Conference on Visual Database Systems (L'Aquila, Italy, May 1998); TINA'97 (Santiago, Chile, Nov 1997); VLDB'97 (Aachen, Germany, Sept 1997); 26th JAIIO (Buenos Aires, Argentina, Aug 1997); Combinatorial Pattern Matching, CPM'97 (Aarhus, Denmark, Jun 1997); 1st Int. Symp. on Autonomous Decentralized Systems, ISADS'97 (Berlin, Germany, Apr 1997); IFIP WG 9.4 Information Technology for Competitiveness Conference (Florianopolis, Brazil, Jun 1997); XVI Int. Conf. of the Chilean Computer Science Society (Valdivia, Chile, Nov 1996); 3rd Workshop on Protocols for Multimedia Systems, PROMS'96 (Madrid, Oct 1996); 4th European Symposium on Algorithms, ESA'96 (Barcelona, Sep 1996); 5th Ibero-American Congress on Higher CS Education (México City, Sep. 1996); Third South American Workshop on String Processing, WSP'96 (Recife, Aug 1997); 25th JAIIO (Buenos Aires, Aug 1996); IFIP WG 3.4 IT in Management Conference (Melbourne, Australia, Jul 1996); 5th Scandinavian Workshop on Algorithm Theory, SWAT'96 (Reykjavik, Jul 1996); XXII Latin-American Conf. on Informatics, PANEL'96 (Bogota, Jun 1996); Workshop on Algorithms and Data Structures, WADS'95 (Kingston, Aug 1995); Second South American Workshop on String Processing, WSP'95 (Valparaíso, Apr 1995); VLDB'94 (Santiago, Sept 1994) (also in charge of the tutorial program); 21nd SEMISH (Caxambu, Brazil, Aug 1994); 23rd JAIIO (Buenos Aires, Argentina, Sept 1994); XX Latin-American Conference (Mexico City, Sept 1994); III Ibero-American Congress on Higher CS Education (Concepción, Chile, Nov. 1994); LATIN'92 (Sao Paulo, Brazil, Apr 1992); and XVIII Latin-American Conference on Informatics (Las Palmas de Gran Canaria, Spain, Aug 1992).

18 Seminars

Invited speaker at many institutions all around the world, in many of them more than once. For sake of conciseness we do not give dates, nor cities, only countries and institutions (without the frequency).

- Argentina: Univ. de Buenos Aires, UNICEN, Univ. Nac. de La Plata, Univ. Nac. de San Luis, Univ. Nac. del Sur, Univ. Nac. de Rosario, Univ. Nac. de Santa Fe;
- Armenia: FAST Foundation;
- Australia: Univ. of Sydney, Univ. of Queensland, Univ. of Melbourne, CSIRO (Sydney & Canberra), Griffith University, Queensland Univ. of Technology, RMIT, Yahoo 7;
- Austria: TU Wien, Central European Univ., Institute for Human Sciences (IWM), Complex Systems Hub;

- Azerbaijan: Ada University;
- Bolivia: Univ. Mayor de San Andrés, Univ. Mayor de San Simón, Univ. Privada de Sta. Cruz, Univ. Nur;
- Brazil: Fed. Univ. of Minas Gerais, Brazilian Physics Research Center, Univ. de Campinas, Univ. de Sao Paulo, Fed. Univ. of Pernambuco, Fed. Univ. of Mato Grosso do Sul, Univ. Fed. de Rio Grande do Sul, Catholic Univ. at Rio de Janeiro and at Porto Alegre, Univ. Fed. de Bahia, Univ. Fed. de Ouro Preto;
- Canada: Univ. of Waterloo, Univ. of Western Ontario, Univ. of Toronto, Univ. of British Columbia, Carleton University, Dalhousie University, Univ. of Alberta;
- Chile: Catholic Univ. at Santiago, Univ. Técnica Federico Santa María, Univ. Católica del Norte, Univ. de Tarápaca, Univ. de La Frontera, Univ. del Bío-Bío, Univ. de Magallanes, Univ. de La Serena, Univ. Austral, Univ. de Concepción, Univ. de Talca;
- Check Republic: Check Academy of Sciences, Charles University;
- China: Tsinghua University, Zhejiang University;
- Colombia: Univ. de Los Andes, Univ. Autónoma de Bucaramanga, Univ. EAFIT, Univ. Industrial of Santander, Univ. Jorge Tadeo Lozano;
- Costa Rica: Inst. Tecnológico de Costa Rica;
- Cuba: CENIAI, Univ. de La Habana;
- Denmark: Univ. of Aarhus;
- Ecuador: National Polytechnic Univ., Catholic Univ.;
- El Salvador: Univ. Tecnológica del Salvador, Univ. Gerardo Barrios;
- Estonia: Univ. of Tartu;
- Ethiopia: Addis Ababa University, Addis Ababa Science & Technology University;
- France: INRIA-Rocquencourt, Univ. of Paris (Jussieau, Orsay, Nord), Univ. Marné la Valleé, Univ. of Nancy, Univ. Joseph Fourier;
- Finland: Univ. of Helsinki;
- Germany: European Consortium Research Center, Dagstuhl Research Center, Technical Univ. of Berlin, Magdeburg Univ., Darmstadt Univ., Leipzig Univ., Frankfurt Univ., Hannover Univ., Karlsruhe University;
- Greece: Aristotle University;
- India: IIT Bombay, IIT Madras, IMSc Chennai, IISc Bangalore;

- Italy: Fibonacci Institute, Univ. of Rome, Univ. of Venice, Univ. of Padova, Univ. of Pisa, Politecnico di Milano, Univ. Milano Biccoca, Univ. of Siena, Univ. of Bologna, Univ. of Trento, Gran Sasso Science Institute, Bocconi Univ.;
- Japan: NTT Labs., Univ. of Tokyo, Tokyo Institute of Technology, IEE Nagoya;
- Malaysia: Multimedia University, Univ. Malaysia Sarawak;
- México: Univ. Nacional Autónoma, Instituto Politécnico, Tecnológico de Monterrey, CINVESTAV, CICESE, Univ. de Zacatecas, Univ. de Querétaro, CIMAT, Univ. Michoacana, Univ. de Puebla;
- New Zealand: Univ. of Canterbury, Massey University;
- Nigeria: Ladoke Akintola University of Technology (online);
- North Cyprus: Middle East Technical University;
- Norway: Norwegian University of Science and Technology, Bergen University;
- Netherlands: Univ. of Twente, Leiden University;
- Paraguay: Univ. Nacional, Univ. Católica de Nuestra Señora de la Asunción;
- Pakistan: Univ. of Management and Technology;
- Perú: Univ. de Lima, Univ. Antenor Orrego, ESAN, SISE, RCP, Univ. de San Agustín, DATAPRO, Univ. Nac. del Altiplano;
- Portugal: INESC, Univ. de Porto;
- Puerto Rico: Univ. of Puerto Rico at Mayaguez;
- Qatar: Qatar Foundation Research Institute;
- Russian Federation: Yandex; Polytechnic State Univ. of Saint Petersburg, Vorozhnev Univ;
- Singapore: National University, Singapore Management University;
- South Korea: National University at Seoul, ETRI, ICU-KAIST;
- Spain: Polytechnic Univ. of Catalunya, Univ. de Valladolid, Fundesco/ATI, Univ. Pompeu Fabra, Centro de Recerca Matemática, Univ. of Granada, Univ. Rey Juan Carlos I, Univ. Carlos III, Univ. of Islas Baleares, Univ. of Santiago de Compostela, Univ. of A Coruña, Univ. Autónoma de Barcelona, Univ. de Barcelona, Univ. de Jaén, Univ. of Alcala, Polytechnic Univ. of Madrid, Polytechnic Univ. of Valencia, Univ. Rovira i Virgili, Univ. Autónoma de Madrid, UNED, Univ. Jaume I, Inst. of Artificial Intelligence, Polytechnic Univ. of Las Palmas, Univ. Deusto, Univ. of Basque Country, Cantabria Univ., Univ. of Oviedo, Univ. of Alicante;
- Sweden: KTH, Univ. of Lund, Chalmers Univ.;
- Switzerland: Swiss Institute of Technology (ETH), Swiss Federal Polytechnic (EPFL), IDlap;

- Taiwan: Academia Sinica;
- Trinidad and Tobago: Univ. of West Indies;
- Arab United Emirates: Pilani Dubai (online);
- United Kingdom: Oxford Univ., Glasgow Univ., Queen Mary Univ., Open Univ., Microsoft Research (Cambridge), Birmingham Univ., Aston Univ., Bristol Univ., Wolverhampton Univ., Loughborough Univ., Liverpool Univ.;
- United States: Stanford Univ., Carnegie Mellon Univ., Univ. of Washington, Univ. of Texas at Austin, Indiana Univ., National Institute of Health, Univ. of Arizona, Texas Instruments Labs., IBM T.J. Watson & Almaden Research Centers, Rensselaer Pol. Ins., Oracle, Hewlett-Packard Labs., NASA Ames Research Center, Stanford Linear Accelerator Center, Google, Microsoft Research, Facebook, Yahoo!, Mozilla, EBay, Univ. of Washington, SAP Research, Univ. of Utah, A9.com (an Amazon.com subsidiary), NYU Poly, FXPal, eBay, George Mason Univ., Univ. of Houston, Northeastern Univ., Northwestern Univ., Univ. of California at San Diego, Santa Barbara, Riverside, Davis & Merced, ISI at USA, UMass at Boston, ACM Chapters of Bay Area & Sacramento;
- Uruguay: Univ. de la República;
- Venezuela: Univ. Simón Bólivar, Univ. de Los Andes, IBM Scientific Center, and Univ. Central.

19 Other Relevant Information

- I have been referee for the following journals: Communications of the ACM, Journal of the ACM, IEEE Trans. on Computers, IEEE Trans. on Data and Knowledge Engineering, IEEE Trans. on Circuits and Systems, Journal of Algorithms, BIT/Nordic Journal of Computing, Algorithmica, ACM Computing Surveys, ACM Trans. on Database Systems, VLDB Journal, ACM Trans. on Information Systems, Information Systems, SIAM Journal on Discrete Mathematics, SIAM Journal on Computing, Computational Geometry: Theory and Applications, Information Retrieval Journal, World Wide Web Journal, Journal on Discrete Algorithms, Information and Processing Management, Journal on Combinatorial Theory (A), Information and Computation, Information Processing Letters, VLDB Journal, Artificial Intelligence, Random Structures & Algorithms, Theoretical Computer Science, Software-Practice and Experience, Combinatorics, Probability & Computing, Parallel Computing, Journal of Information Science, Int. J. of Computer Mathematics, Journal of Automata, Languages & Combinatorics, Acta Informatica, and The Computer Journal. I am also a reviewer for Mathematical Reviews, Butterworths, and Information and Software Technology.
- Panelist for the Intelligent Information Systems Program of the National Science Foundation, USA, 2018 & 2020.
- I have evaluated grant proposals for the National Science Foundation (USA), NSERC (Canada), ISF (Israel), CONICYT (Chile), CNPq (Brazil), GACR (Check Republic), RGCP (Hong Kong), RCN (Norway), CONICET (Argentina), CONICYT (Uruguay), MEC CICYT (Spain) and Chilean/European Community projects.

- I have also evaluated proposal for public biddings in Chile and research projects for Catalonia, the Community of Madrid and several Chilean universities, as well as curricula proposed to the Higher Education Council of Chile and the Council of Chilean Universities.

- Participation as external reviewer for Ph.D. theses at Univ. Paris 7, Univ. Marné la Valleé, Univ. of Grenoble (France), Univ. of Hannover Univ. de Karlsruhe (Germany), Univ. of Amsterdam, Univ. of Twente (Netherlands), NTNU (Norway), CMU, Georgia Institute of Technology (United States), Univ. of Melbourne (Australia), University of Lisbon (Portugal), Univ. di Roma (Italy), Univ. Politécnica de Madrid, Univ. Politécnica de Catalunya, Univ. de Valladolid, Univ. de A Coruña (Spain) and Univ. Fed. de Rio Grande do Sul (Brazil).

- I have been external evaluator for hiring or promotion cases in Argentina, Australia, Brazil, Chile, France, Germany, Israel, Norway, Spain, Taiwan, UK and USA; as well as reviewer for book proposals of several publishers.

- Several dissemination papers in Chilean magazines and monthly column in Informática (Chilean magazine) from 1993 to 2004. Editor of the Latin American news column in the Bulletin of the EATCS (1994-97).

- Have written several short science fiction stories, some of them published in Fanzines in Chile and Italy.

- Interviews for TV, radio, or press in Bolivia, Chile, Colombia, Costa Rica, Guatemala, India, Spain, Uruguay, United Kingdom (CBC), and USA, among others. The most watched interview is on artificial intelligence and Internet by Aquae TV (in Spanish) that has been watched more than 4,700 times (https://www.youtube.com/watch?v=1ZzOgY5aOV4).

- My main interest areas for both, teaching and research, are: information retrieval and its application to the Web, Web data mining, data structures, design and analysis of algorithms, visualization applied to CS.

- Native language: Spanish. I am fluent in English and I understand Portuguese and Catalan. I can read Italian and French.

- I love geography, traveling, good food and wine, science fiction, and chess. I like to practice tennis, squash and football (soccer).